

A HANDBOOK
TO
INDIA
BURMA AND CEYLON

* *This sign in the text appended to a name indicates that further information relating to the subject is to be found in the INDEX AND DIRECTORY at the end of the book.*

INDIAN CURRENCY

The leading idea is that one anna=one penny, one rupee=16 annas =1s. 4d.; and 15 rupees=£1. (*In Ceylon*, the rupee is divided into 100 cents.)

GOVERNMENT OF INDIA NOTES (valued, rupees 5, 10, 50, 100) circulate throughout India. The notes of the Presidencies are subject to a rate of exchange outside their respective Presidencies: they are gradually being superseded by Government of India Notes.

Silver Coins—

- 1 RUPEE=16 annas=1s. 4d.
- 15 RUPEES=£1.
- $\frac{1}{2}$ RUPEE=eight annas=8d.
- $\frac{1}{4}$ RUPEE=four annas=4d.
- $\frac{1}{8}$ RUPEE=two annas=2d.

Nickel Money—

- 1 ANNA (distinguished from the 4 anna piece by its wavy edge).

Copper Coins—

- 1 ANNA=four pice=twelve pie=1d.
- $\frac{1}{2}$ ANNA=two pice=six pie= $\frac{1}{2}$ d.
- $\frac{1}{4}$ ANNA=one pice=three pie.

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POST CARD, $\frac{1}{4}$ anna.

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„ exceeding 1 tola, but not exceeding 10 tolas, 1 anna.

„ every additional 10 tolas, or part of that weight, 1 anna.

(BOOK POST, every 10 tolas= $\frac{1}{2}$ anna).

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To FOREIGN COUNTRIES $2\frac{1}{2}$ annas per oz.

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(a) INLAND TELEGRAMS—

					Per unit of 12 words, RS. ANNAS.	Per word additional. RS. ANNAS.
URGENT	1 0	0 2
ORDINARY	0 8	0 $\frac{1}{2}$

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	via Turkey	1 6 per word.
„	via Suez or Teheran	1 8 „ „

BRITISH INDIAN MONEY AND POSTAGE STAMPS are current in all NATIVE STATES. The coins and stamps of Native States are limited to the territories of their respective States.

A HANDBOOK FOR TRAVELLERS IN INDIA BURMA AND CEYLON

INCLUDING

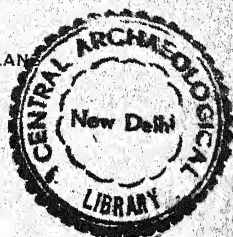
ALL BRITISH INDIA, THE PORTUGUESE AND FRENCH
POSSESSIONS, AND THE PROTECTED NATIVE
STATES.

"India and the Golden Chersonese
And utmost Indian Isle Taprobane,
Dusk faces with white silken turbans wreathed."

—MILTON, *Par. Reg.*, iv. 74-76.

TENTH EDITION

WITH SEVENTY-NINE MAPS AND PLANS



LONDON
JOHN MURRAY, ALBEMARLE STREET

1919

PREFACE TO THE TENTH EDITION

THIS, the Tenth Edition, has been prepared by the same methods and on the same lines as the Ninth. Mr Murray and the Editor desire again to acknowledge gratefully the kindly help which they have received from a very large number of officers and others in India and England. Serious difficulties have sometimes occurred owing to the War: and it is feared that in some cases valuable information has been lost "through enemy action." If imperfections and deficiencies are noticed, these causes may be offered generally as the explanation.

C. E. BUCKLAND,
I.C.S. (retired).

1st April 1918.

PREFACE TO THE NINTH EDITION

THE complete revision of a Handbook is perhaps a suitable occasion for a revised preface to it, and for the brief record of the birth and growth of the work.

The Handbook of India was originally published by Mr John Murray in three separate volumes, for the Bombay, Madras, and Bengal Presidencies. The first two of these parts appeared in 1859, the Bengal volume not till 1882. A fourth volume, dealing with the Panjab and North-West India, was added to them in 1883. They were all prepared by the late Captain E. B. Eastwick, M.P., who made long visits to India, in the fifties, sixties, and seventies, in order to collect the material for them on the spot. When it is recollected how incomplete the railway communications between the different parts of India then were, that the *Imperial Gazetteer*, edited by Sir W. W. Hunter, had not yet appeared, and that up to the time very few volumes of District Gazetteers had been issued, it will readily be conceded that Captain Eastwick's task was a difficult and laborious one, and that allowance might be fairly claimed for any shortcomings in the volumes compiled by him.

These volumes were amplified and brought up to date on several occasions, and in 1892 condensed into a single volume of 500 pages, which was again revised in 1894, 1898, 1901, 1904, 1909, and 1911. In the course of these revisions much additional information was added to the Introduction regarding the people of India and the religions, architecture, and arts of the country; maps of the rainfall, temperature, and local products of the country were inserted; to a brief special account of the Mutiny of 1857 was added a map showing the distribution of the army in India at that crisis, the faultiness of this being mainly responsible for the serious proportions which that outbreak ultimately assumed; the arrangement of the book was largely recast in accordance with recent railway developments, and the account of nearly all the principal places in India was rewritten on the topographical plan, which is usually found to be the most convenient by travellers using a guide-book on the spot; brief sketches of the Muhammadan and Hindu Rulers of India, and of the Mahrattas and Sikhs were included; fuller accounts were given of the chief religions prevalent in India; brief notices were inserted of the form of administration of the Indian Government, of irrigation, famine, and plague, of the working of the railway, postal, and telegraph Departments, and of the Christian Religion; some new maps were added from time to time, and improved maps substituted, brought up to date. All this was necessitated, to quote the words of the first edition of the consolidated Handbook, by the fact that "time and events have effected great changes, not only in the country itself, but also in the facilities for reaching it from all parts of the world, and for travelling throughout the peninsula. The public, moreover, are yearly becoming better aware of the glorious field which in India is opened up for the enjoyment of travel and sport, and of the inexhaustible opportunities afforded them for the study of an engrossing history, an interesting nationality, and an unrivalled art, as displayed not only in architectural monuments, but also in native industries and handicrafts."

The description of Ceylon was originally written by the late Lord Stanmore and subsequently revised by him.

In the present edition the general scheme of the Handbook has been maintained. Every portion of the Introduction has been carefully examined; many of the sections have been rewritten and corrected by the light of further knowledge; some new sections and maps have been added; the figures of the last census of 1911 have been adopted wherever available—the general object has been to provide the best and newest information attainable regarding the country and places mentioned, the means of travel, and the sights best worth seeing.

The spelling followed, nearly always, has been that adopted in the General Index of the Imperial Gazetteer of 1909 (Atlas Volume, xxvi.), which has, at any rate, official authority. This system is admittedly based to some extent on compromise, and may, therefore, be not altogether acceptable to those who would make no exceptions in favour of the older, though irregular, spelling of certain well-known places. While this system has been consistently observed in the body of the work, the existing maps have not been corrected to conform to it, but the small differences will not affect their utility.

No attempt has been made to indicate tours in India, as these must depend so much upon the tastes and interests of individuals. The list of routes on pages xiii-xv will, it is believed, enable travellers readily to form for themselves any tours they may wish to make; and all further details can be obtained from the Railway Guides of India, or from Messrs Thomas Cook & Son, who have branch offices at Bombay, Calcutta, Rangoon, and Colombo.

The special feature of this edition is that many of the changes effected in it are based on the voluntary, unofficial, and courteous co-operation of officials and other residents in all parts of India, Burma, and Ceylon, who have access to the best and newest information. To the several Governments, who, with hardly an exception, graciously allowed their officers to be addressed; to the officers in India, Burma, and Ceylon who have so obligingly favoured him with their assistance; to certain officers at the India Office who have facilitated his labours; and to certain experts who have liberally contributed their special knowledge, the Editor desires to offer his sincere thanks. To each and all of them he wishes to express his grateful acknowledgments. No care or trouble has been spared, on his part, to make the book complete and thorough in all details, so far as space has permitted.

Mr Murray desires to associate himself with the Editor in recording his best thanks to all whom the latter has mentioned for the great help with which they have favoured him. He trusts that this effort to add to the truth available about India, to make better known the splendid sights of the country, and to afford assistance to travellers, will conduce to a fuller appreciation in England of the great Dependency so ably governed and administered by successive generations of officers. To many visitors to India, friends, and travellers, from whom he has received valuable aid, Mr Murray desires to express his gratification at the very kindly recognition accorded by them to the usefulness and completeness of the Handbook.

As was noted in a former edition of the Handbook, "it is

impossible to ensure perfection in any guide-book, however carefully prepared. The publisher therefore hopes that where inaccuracies are found the indulgent traveller will kindly point them out to him, with a view to their correction on the first opportunity. Any such acceptable communications may be addressed to Mr Murray, 50A Albemarle Street, London, W."

C. E. BUCKLAND,
I.C.S. (retired).

July 1913.

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2 Bombay to Calcutta by Kalyan, Nasik, Manmar, Jalgaon (Caves of Ajanta), Bhusawal, Khandwa, Itarsi, Jubbulpore, Katni, Manikpur, Allahabad, Mughal-sarai (Benares), Patna, Mokameh, Lakhsarai, and Asansol, with journeys to Pachmarhi, the Marble Rocks, Buddha Gaya, and Parasnath . . .	30	(2) to Ahmadabad, and thence by metre gauge to Delhi (849 m.) by Mehsana, Palanpur, Abu Road, Marwar Junction, Ajmer, Phalera Junction, Jaipur, Bandikui Junction, Alwar, Rewari, and Gurgaon, with excursions by road to Mount Abu, and by rail to (a) Dabhoi, (b) Luni Junction (branch line to Hyderabad, Sind), Jodhpur, Bikaner, and Phalera Junction . . .	162
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10 Bombay to Delhi by Surat, Broach, Miyagam, Baroda, and thence (1) by broad gauge direct			

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INTRODUCTORY INFORMATION

(1) GENERAL HINTS

ENGLISH LANGUAGE

A TRIP to India is no longer a formidable journey, or one that requires very special preparation. Among the difficulties which have disappeared of late years is that of the language. English is now spoken at all hotels and railway stations, and in all post and telegraph offices; and the leading shops in all large places have good articles for ordinary requirements, with attendants who speak English. The same facilities usually exist in those native shops for the sale of works of Indian art and manufacture which travellers are likely to visit; and local guides with a knowledge of English, more or less imperfect, are available at all important centres. Visitors will also find that a great many of the educated Indians whom they will meet are able to hold simple conversations in English, and that many speak the language exceedingly well; while the courteous request of a gentleman is sure to meet with a willing response.

SEASON FOR VISIT TO INDIA

The season for a pleasant visit to the plains of India lies between 15th November and the end of March. In the Panjab these dates can be slightly extended; but in October and April the heat may be found trying in the Red Sea and at the ports of arrival and departure. Up to 15th October and after 10th April the weather at the ports may be almost as trying as any in the year, much more so than in July, August, and September, when constant rain cools the atmosphere. Owing to the large numbers of officers of the Indian Service who return to India in the autumn, and of annual visitors to the country for "the cold season," the best accommodation on the larger and faster steamers, and especially on the P. & O. boats, is usually booked months ahead—outwards between 15th October and 1st December, and homewards for March and April; and this fact must be borne in mind by intending travellers to India. For further hints regarding the voyage, see p. xxxviii. It may be added here that a good and strong deck chair is essential to comfort on board ship. The long cane chairs are the most comfortable, but unwieldy. The folding canvas chair is more portable. Second-hand deck chairs are generally obtainable, cheap, at the port of embarkation.

EXPENSES

The rates of fare charged by the principal lines of steamers to India are exceedingly high—about £3 per day, but owing to the depreciation of the rupee the traveller will find India a fairly cheap country, the ordinary hotel charges outside the Presidency towns, and apart from special occasions, being 6 to 8 rupees¹ (8s. to 11s.) a day for board and lodging, with usually a small additional charge for a hot bath. It is customary also to give a small gratuity to the water-carrier (*bhisti*) and the sweeper. As walking in the heat of the day is better avoided even in the cold weather, carriages have to be used generally in order to visit the objects of interest. The charge for a day varies from 5 to 7 rupees. Taxi-cabs and motors can now be hired at most of the principal places. All hotel and carriage charges tend to rise slowly. At private houses it is usual to give a present to the head servant on behalf of all the attendants. This need not exceed 5 rupees for a visit of a week or ten days. The railway charges are moderate, being usually 1½ annas, or 1½d. per mile for 1st class, half that sum for 2nd class, and less for journeys over 300 miles. As elsewhere in the world, the traveller will have to supply himself constantly with a sufficiency of small change—2, 4, and 8 anna pieces.

MOTORING

The use of motor-cars is becoming very general in India, and the roads in all large places and the main roads connecting these will ordinarily be found good. A small book on motoring in India by Watney & Lloyd has been published in England, and the Local Governments in India have published, or are publishing, Motor Route-books. *The Motorists' Guide* (India), by M. J. Giles, Head Police Office, Bombay, published at Bombay by "The Times Press," should be in the hand of every motorist in India. It contains the Laws and Rules on the subject of motoring, much excellent advice to motorists and, *inter alia*, some details of the principal routes, viz., Bombay to Delhi, Calcutta to Delhi, Bombay to Madras, Poona to Mahabaleshwar, Mahabaleshwar to Bombay. Expeditions to places of interest, which previously could only be made by country conveyances, can now in many cases be carried out easily and rapidly in motors, though at greater cost. It may sometimes be convenient to make tours, or go from one large place

¹ The value of the rupee is practically fixed at 1s. 4d. by Government legislation. English sovereigns are accepted at all Government offices, at hotels, and railway stations, at an exchange value of Rs. 15 for a sovereign.

to another, by motor rather than by railway or otherwise. The location of garages and petrol stores should therefore be noted carefully. Cars must be crated for shipment: the cost is about £4 to £6, according to size of car. Tyres should be removed, and all grease and oil removed from the engine and other parts as far as possible before packing. The freight costs from £15 to £30, according to size of car.

Bombay.—For landing and getting ready for the road, Rs.150 (£10), say, should be allowed. The import duty is 5 per cent. *ad valorem*.

Bombay is the best place to land for a tour through Northern India, as the roads are good, and arrangements for petrol, etc., are easily made. The Bombay Motor Car Company will arrange to land and prepare cars so that all may be ready when the owner arrives. The Company should be addressed well in advance, and given the particulars of the proposed tour, and they will make all arrangements for supplies of petrol, etc., etc., *en route*.

Calcutta.—Landing, etc., and duty as above. The Russa Engineering Works, Ltd., 4 Fairlie Place, will land cars as above and make all the necessary arrangements. Particulars as to roads and suitable tours can be obtained from the Secretary, Automobile Association of Bengal, 1 Park Street. Maps of Bengal, showing usable roads, can also be obtained from him. Petrol is available in the Presidency towns at R.1 per gallon and at all the principal towns up country at prices ranging from R.1.8 to Rs.2.8, according to distance from nearest sea-port.

The main roads are, as a rule, excellent from December to March. In many places rivers are unbridged, but are passable during the above months by fords and in some cases ferries. A car with a good clearance is therefore a desideratum.

Tyres and repairs.—The above can always be obtained from either of the firms mentioned above and at most of the larger cities in Northern India, but in view of the great distances it is very advisable to be well provided with spare tyres on the car.

It is possible nowadays to motor from Bombay to Calcutta by road—a distance of some 1700 to 1800 miles, and the tour can be lengthened or shortened indefinitely to suit time available. A car has travelled (some nine or ten years ago) between these two towns in four and a half days, but a month or more can be spent most enjoyably in exploring the wonderful cities of Northern India.

If time permits, the journey from Delhi *via* Lahore to Rawalpindi, and from thence into Kashmir, is to be recommended, but the latter portion of the road into Kashmir is not (ordinarily) open much before

March or April, when the heat in the plains is very great. It is therefore difficult to combine the whole tour in one season.

Sola Topis and smoked glasses are essential even in the cold weather.

The same hints regarding bedding, supplies, and native servants, apply, of course, to motor-travelling as to travelling generally in India.

CLOTHING

Not very long ago it was thought essential to have a special outfit prepared for a journey to India. This is scarcely the case now.

For the voyage a few warm clothes for the Northern part and thin clothes for the Red Sea and Arabian Sea are required; otherwise ordinary English summer clothing will suffice. As regards the lighter clothes, a man will find it convenient to have a very thin suit of tweed or grey flannel for day, and a thin dress jacket for dinner.

A lady cannot do better than provide herself with thin skirts of tussore silk or some such material, and thin silk or other blouses. Shoes with india-rubber soles are the best for the deck.

As the amount of luggage which can be taken into the traveller's cabin is necessarily limited, a careful arrangement beforehand of articles needed for different parts of the voyage is of considerable importance for comfort. The cabin luggage must contain sufficient underlinen and linen for the whole voyage. A bag, with a lock, for soiled linen should not be omitted. The arrangements for obtaining luggage from the hold on the voyage have been greatly improved, so that on the better lines the heavy luggage can be obtained any day, practically whenever required: it is, therefore, not necessary to have as much cabin luggage as formerly.

For a winter tour in the plains of North and Central India generally, and in Upper Burma, a traveller requires such clothing as he would wear in the late spring or autumn in England, but in addition he must take warm winter wraps. A man should have a light overcoat, in which he can ride, and a warm long ulster for night travelling or the early morning. A lady, besides a warm jacket and shawl, should have a loose, warm cloak to wear in long drives before the sun rises or after it sets, or to sleep in on railway journeys if it is very cold. Visitors to India must remember that while the mid-day is always warm, sometimes very hot, the evening dews may be so heavy as to absolutely *wet* the outer garment. Also, the cold of the nights and mornings is often very sharp, so that the secret of dressing is to begin the day in things that can be thrown off as the heat increases, and can be resumed as the cold returns. In some places in North India in the winter months the temperature

will fall between 40° to 50° within the two hours on either side of sunset, and the risks of serious chills in consequence of such sudden changes are very great, if due care is not taken to meet them. It has often been said that more illness is contracted from chills in India than from the heat. Real winter clothing will be necessary if it is intended to visit any **hill-station**. Flannel or woollen underclothing and sleeping garments, and a flannel "kamarband" (a belt of flannel 8 in. to 12 in. wide, worn round the waist), are strongly recommended for wear at all times.

Throughout the **South¹ of the peninsula**, and at times even in Bombay and Calcutta, much thinner clothing is required. Cool linen suits for men, and very thin dresses for ladies, as also khaki riding- and shooting-suits, can be got cheaper and better in India than in England, and a native tailor will make a very satisfactory suit from an English pattern.

Linen and underclothing for at least three weeks should be taken—with less the traveller may be inconvenienced on arrival, or even detained until his board-ship clothes are washed. The Indian washermen, though not as bad as they used to be, still destroy things rather rapidly. A lady will find a light dust-cloak a great convenience for railway travelling.

The hospitality of India involves a considerable amount of dining out, and therefore a lady, unless she intends to eschew society, should be provided with several evening dresses. If it is intended to join friends in camp, or make any long expeditions by road, riding-breeches and gaiters for men, and riding-habits for ladies, should not be forgotten.

A good sun-hat is an essential. A shape adopted by Lord Curzon has become common. Some years ago the *Tarai hat* (two soft felt hats fitting one over the other) was often worn—with a *pagri* tied round it. It is a picturesque head-dress, but it has fallen into disuse. It will, however, generally suffice for the cool months, but even in them the mid-day sun in India is dangerous, and it is therefore advisable to wear a cork or felt helmet, which is lighter and better ventilated, and affords more protection from the sun than the *Tarai hat*, and is indispensable in real hot weather. A sun-hat should have a brim which will protect the temples and back of the neck, at top of the spine, and is well ventilated all round. Many London hatters have a large choice of sun-hats and helmets, for ladies as well as men; and travellers should be careful to wear such head protection whenever they are exposed to the sun during the voyage. A white cover (without a frill) to the umbrella is also desirable,

¹ This may be taken as applying to all places South of Hyderabad, in the Deccan, excluding the higher plateau of Mysore.

especially for a lady; a straw or other light hat will be found convenient for the cool hours of the morning and evening. Much larger hats, which can be best obtained in India, should be worn for shooting expeditions extending over the whole day.

A traveller in **Ceylon** will seldom require any but the lightest of clothing, except in the mountains, where the temperature becomes proportionately cooler as he ascends. At Kandy a light overcoat, and at Nuwara Eliya warm wraps and underclothing are necessary.

For further hints, Dr Harford's *Hints on Outfit in Tropical Countries* (Royal Geographical Society) may be consulted.

BEDDING

Every traveller who contemplates a tour must, on arrival in India, provide himself with some bedding, to be taken with him everywhere, even when on a visit to friends; it should always be with him in the railway carriage if he is going to spend a night in the train. Except at the best hotels, there is either no bedding or there is the chance of its being dirty. The minimum equipment is a pillow and two cotton-wadded quilts (*razais*), one to sleep on, and one, which should be larger, as a coverlet; or a good *razai* and a couple of warm blankets, or, still better, an eider-down. The ready-made *razais* are usually thin, but they can be got to order, of any thickness. To these should be added a pillow-case, cheap calico sheets, and a light blanket. A canvas or waterproof cover to wrap the bedding in must not be omitted, or the first time it is carried any distance by a coolie or taken into camp it may be dirtied. A waterproof sheet is a useful addition to the bedding, but cannot be called an absolute necessity for an ordinary tour. Without such a modest supply of covering as is here indicated a traveller may at any time have to spend a night in very severe cold, especially if travelling by railway, as the windows and doors of the carriages seldom fit well enough to keep this out. Two or three towels, for use on railway journeys, should also be added to the above outfit.

TRAVELLING SERVANTS

A native travelling servant who can speak English is highly desirable, but should not be engaged without a good personal character or the recommendation of a trustworthy Agent. Such a servant is almost necessary to wait on his master at hotels, where, without him, he would be but poorly served; and will be found very useful in a hundred different ways when travelling by rail or otherwise, and as an interpreter when dealing with natives. Having ascertained

beforehand, from his Agents or friends, the fair wages which such a servant ought to be paid (these vary from Rs.25 to Rs.35 per mensem), the master should come to a definite arrangement with him before engaging him; and it is usually advisable to have an agreement with him in writing. If the servant proves satisfactory, it is the custom to make him a present on parting with him. If the traveller has friends "up country," it may be well to write beforehand and ask them to engage a servant, and send him to meet his master at the port of arrival. "Up-country" servants are often cheaper and more trustworthy than those to be met with on the coast, but their knowledge of English is not generally very good. Ladies may travel with an accredited man-servant without hesitation, and will find him far more useful than an *áyáh* in almost all respects. The services of a good *áyáh* are more difficult to secure than those of a *bearer* servant, and naturally are more expensive. The best *áyáhs* with a knowledge of English come from Madras. During the first two or three days of his service it should be carefully explained to the travelling servant exactly what he is expected to do, and it will usually be found that he will thereafter do this satisfactorily. It may be added that such servants should be quietly kept in their proper places.

INDIAN RAILWAYS

The *Indian A.B.C. Guide*, the *Indian Railway Travellers' Guide*, and Newman's *Indian Bradshaw*, with maps, railway routes in India, and general information of steamer routes, are the best. Even if Agents are consulted for routes and arrangements for journeys, it will be desirable to obtain a Railway Guide-book: as the times of trains are liable to alteration, those given in the *Handbook* cannot be guaranteed as permanently correct. For railway purposes the hours are counted from midnight up to 24, as in Italy: thus 20.12 is 8.12 P.M., and so on. Railway time throughout India is now Standard time, which is 5½ hours in advance of Greenwich time.

The difference with regard to the local times in India is as follows:—

Standard time in advance of Madras 1 min.

"	"	Bombay	39	"
"	"	Allahabad	2	"
"	"	Delhi	22	"
"	"	Karachi	61	"
"	"	Lahore	37	"
"		behind Calcutta	24	"
"	"	Chittagong	37	"

Standard time in Burma is $6\frac{1}{2}$ hours in advance of Greenwich, or 5 minutes in advance of Rangoon time.

At many of the larger towns there are two stations or more. Where there are both the traveller should, as a rule, book, not to the "City," but to the "Cantonment" station; but before booking he should note which station is mentioned in the *Handbook*. The Railway Companies in India are doing much for the comfort of 1st and 2nd class travellers, but might do still more—*e.g.*, by supplying electric fans in the carriages, and seeing more closely to the management of the refreshment rooms. Electric fans can, by previous arrangement, be obtained in most railway carriages. In the 1st and 2nd class compartments the seats, which are unusually deep, are so arranged as to form couches at night, but bedding and pillows are not furnished. Each compartment is provided with a lavatory. At all terminal stations, and at various large roadside stations, berths in the carriages can be booked beforehand. It will generally be found convenient to send a servant ahead to the station with the luggage, so that he may book it; if tickets have not been taken beforehand, a slip with the destination of the traveller written on it should be given to the servant to obviate mistakes. The payment of coolies (porters—usually 2 to 4 annas) is best left to a servant: he may cheat the coolies to some extent, but the traveller will be saved much annoyance and some expense.

There are refreshment rooms at frequent intervals, and some of them are well managed and supplied; travellers intending to make use of them should signify their intention to the guard of the train beforehand, and he will telegraph (free of charge) to the station indicated; in Madras tickets for meals are purchased at the same time as the railway ticket. Restaurant cars now run on most of the express mail trains. The failure of the manager of any refreshment room to provide a proper meal or food, when ordered beforehand, should never be overlooked, but should be invariably reported to the Traffic Superintendent of the line. In extreme cases payment of the full price demanded for the meal should be refused.

The Station-masters are particularly civil and obliging, and will, where possible, arrange for ponies, conveyances, or accommodation at out-of-the-way stations, if notice is given them beforehand; they will also receive letters addressed to their care, which is often a convenience to travellers. For some obscure reason the guards of trains render none of the services expected of them in Europe, and are generally conspicuous by their absence in the large stations.

Travellers must be careful to see that their heavy luggage is secured by locks and is booked to proceed by the same route as

themselves; all small articles in the carriages should be carefully placed out of the reach of possible thieves in the night, especially if the windows are kept open on account of the heat. At every station which the ordinary traveller is likely to visit conveyances of some sort await the arrival of the trains. When travellers leave their carriages in order to go for meals to the refreshment rooms, a servant or a station coolie should be placed formally in charge of the traveller's property. For a small sum—an anna or two—the coolie can be trusted to guard it.

It is a matter for regret that 3rd class passengers are not always considerately treated by the railway staff. Travellers in India will render a public service by bringing instances of such treatment to notice. The comfort of such passengers has been too much overlooked in the past, but improvements are being effected.

HOTELS, DAK BUNGALOWS, AND REST-HOUSES

Outside the Presidency towns, and a few exceptional places—such as Lucknow, Delhi, and Bangalore, there are hardly any hotels in India really up to the European standard of excellence. At all the chief places fairly large airy rooms will be found in the hotels, but the traveller will hardly be well waited upon unless he brings a servant with him. As they are often crowded in the tourist season, he should give notice beforehand of his intended arrival. Some of the European Clubs admit recommended visitors as honorary members, and a Club which has sleeping accommodation is generally more comfortable than a hotel; but it is seldom that such accommodation is available in the cold weather, unless it is arranged for by a friend beforehand. All property should be kept carefully locked in hotels, as there are usually many strange servants in them, and the verandas of most are frequented by hawkers and other outsiders.

At the Dak Bungalows (Travellers' Rest-Houses established by Government in all important places) the keeper in charge (commonly called the *khánsáma*) will provide meals, but it is usually well to give notice of an intended arrival. The bedrooms in these bungalows have an adjoining bath-room and are usually sufficiently, if roughly, provided with furniture and lights. They cannot be retained beforehand—the first comer having the preference; and after occupying a room for twenty-four hours the traveller must give place, if required, to the next comer. In S. India the name Travellers' Rest-House is generally used. There is a fixed fee for the occupation of the rooms, and usually for each of the simple meals to be supplied. In some cases the *khánsáma* has been in the service of English officers, and will prove to be a sufficiently good cook. In small and out-of-the-way

places it is best to confine his efforts to a curry or *pilau*, which he is sure to prepare well ; and when visiting such places a traveller will do well to take with him small supplies—such as tinned soups and vegetables, tea and sugar, biscuits and the like, and his own whisky or wine.

There are many places well worth visiting, though somewhat off the beaten track—such as Ajanta (Fardapur), Vijayanagar (Kamalapur), and Mandu—where some kind of Rest-House is available, but no arrangements have been made for supplying food, and in other places, *e.g.*, Badami, Mōrtakka, Chaul, etc., only a Public Works, or Engineer's, or Collector's bungalow is available to those who obtain special permission beforehand (it is not always obtainable), and in any case servants and food have to be taken. Details are given in the body of the text. At some railway stations sleeping-rooms for travellers are provided, or waiting-rooms can be utilised in emergent cases, though the Railway Companies warn the public against using them as Dak Bungalows. Before organising trips to less-frequented localities, inquiries should be made, and the traveller should be provided against emergencies. In villages it is generally possible to obtain such supplies as eggs, fowls, milk, and the local grain, through the station-master or village-headman, but the people will not lend their drinking or other vessels to Europeans. Village milk or water should NEVER be drunk until it has been thoroughly boiled. Higher fees might be reasonably charged by Government for accommodation specially provided by Government at places seldom visited by travellers.

The Rest-House of Ceylon is more like a hotel than the Dak Bungalow in India, in that it is more frequently furnished with bedding and linen, and food is generally provided.

FOOD

As a rule the food supplied in hotels and railway refreshment rooms in India is not very good. Outside the really large places and cantonments the meat, with exception of bullock hump, is often lean and tough, the fowls are skinny, and the eggs ridiculously small. The sea fish at the sea-ports is excellent, and the river fish supplied at table elsewhere is generally fresh ; but it does not always agree with persons new to the country, and not even in the case of the *mahsir* does it always commend itself as palatable to them. Game is generally abundant at private tables in the cold weather—quail (early and late in the season), snipe, teal, duck, partridge, and sand-grouse ; but hotel-keepers too often neglect to include this in their

mu. Where there is a good supply of fruit in the market, its proper provision at the hotel table should be insisted upon. Bread fairly good, but this cannot be said of the butter, and milk is not from danger. It is a good precaution always to have the milk boiled, even though the boiling affects its taste. Aerated water should be drunk in preference to plain water, even in private houses; and the water in hotels and refreshment rooms should be absolutely avoided. If the traveller leaves the beaten track, he should have a tiffin (picheon) basket, containing knives, forks, and other simple fittings and supplies; and, as a matter of fact, whenever any long journey is undertaken, it is well to be always provided with such a basket of cooked meats, soups or bovril, biscuits, jam, tea and sugar, some fruit, and soda-water, which is good and cheap in India (to be obtained only from proper manufacturers, not from itinerant vendors at railway stations) as this reduces to a minimum the inconvenience of detention by accident or of failure to obtain an eatable meal at a railway refreshment room. Added to the above, an Etna, or spirit-lamp, will be found a great convenience. Some simple apparatus for making tea should be taken whenever possible, including railway journeys, with milk, boiled, or bottled, from some safe source of supply. Ice in an ice-box, with sawdust, should be taken, especially in the hot weather. On receipt of a postcard, Messrs Balmer Lawrie & Co., in Calcutta, Agents for the Ice Company, will deliver such an ice-box at any station.

HEALTH

It is of great importance, as intimated above, to avoid chills in the east, and damp underclothing should always be changed directly after the body has been overheated. The necessity of using warm clothing until the morning has ceased to be cold, and after the sun has set, or even slightly before the sun sets, has been insisted on above. Excessive bodily exertion and consequent fatigue should be avoided by all who are no longer young, and such persons, if unacquainted with the conditions of sub-tropical life, will do well to consult some medical man experienced in them before undertaking a tour in India. Slight indisposition must not be trifled with in India, even though it would be thought nothing of elsewhere; immediate avoidance of all fatigue is necessary upon the occurrence of any indisposition, and only light food should be taken until it passes away. In cases of fever, or of any ailment with the treatment of which the traveller is not practically acquainted, no time should be lost in seeking the services of a qualified medical man. Such an officer will be found in the Civil Surgeon of all places of any size; private practitioners are usually to be found only in the

Presidency towns. The ordinary fee for attendance is Rs.16, or a guinea, but Rs.10 per visit are usually charged where a number of visits are made.

SPORT

No attempt can be made here to give definite advice to sportmen, but sporting localities have been incidentally indicated in the routes. A number of useful books on sport in India will be found among the publications of Messrs Thacker, Spink & Co., and in the list given under the heading "Sport" on p. xxxvi. The equipment for these pursuits varies from day to day, and each man must best know his own wants. Firearms are subject to a heavy duty when brought into the country, see p. 6. Large-game shooting is expensive and takes time; it should not be attempted except in company with a really good *shikari* and with the assistance of persons of local authority, as otherwise it would probably involve a mere waste of time and useless trial of patience.

Small-game shooting—*i.e.*, wild fowl, hare, etc., with an occasional shot at an antelope—is an easier matter, and will afford excellent sport. It can be got from November till February, often at very small cost, by spending a night or two at some wayside railway station or near some remote spot. In this case also the advice of the "man who knows" will be of the greatest assistance. Near cantonments the ground is always too much shot over to afford good sport.

HINTS FOR CAMPING

Travellers who leave the beaten track with the intention of shooting, or for the purpose of visiting remote or ruined cities, should take a small tent or two with them. Transport in the shape of camels, carts, baggage-ponies, or bearers, can be got in any station, and in the larger places riding-ponies and light native carts, or perhaps even European traps for driving, can be obtained. Those who intend to go into camp (as the Anglo-Indian term runs) will probably be experienced in organising such expeditions, or will have friends who will make arrangements for them, and, in any case, a courteous request for assistance made by calling upon the principal English or Indian officer of the place is sure to meet with courteous consideration; but perhaps the following suggestions of requirements may prove of some use in the case of a solitary traveller who does not mind a certain amount of roughing. In Kashmir camp equipment as below can be hired from the Agents there—elsewhere it would have to be purchased, and would cost probably about Rs.200 to Rs.250.

Tent (Cabul tent, 80 lb. complete) for self, and, if the weather is cold or likely to be wet, a *pal* tent for servants; a few iron tent pegs (wooden ones for soft ground); and a mallet. Camp-bed with side poles of one piece, table, chairs, and carpet. India-rubber flat bath, and a board to stand on, or tubbing can be done by pouring native pots of water over the head (fresh native pots can be obtained at any village), a screen (*kanāt*) to use as a bath-room, a washing-basin (*chilamchi*) and stand, hooks to strap on tent-pole for hanging clothes on, etc.; aluminium cooking-pots, and fry-pan, an iron dish or two, a few knives, forks, and spoons, aluminium plates, cups, and saucers, and mustard, pepper, and salt pots. Servants required in camp are—a man or boy to wait, a cook, a water-carrier (*bhisti*), and grooms for horses. All food for the traveller, except milk and fresh meat, must be taken with him. Food for servants, milk, and meat (goat or sheep or chickens), can be got in any but the poorest villages. For bedding and clothes take blankets, sheets (luxury), an Indian shooting-suit, rough boots and gaiters, a light flannel suit or two, a large sun-hat for shooting in, and a second sun-hat and a cap for wear in the camp. A mosquito-net and poles for it will be needed if mosquitoes are likely to give trouble at night.

If white ants are about, boxes and carpets should be shifted every morning. The ravages these and other insects can commit are rapid and extensive. Persons not accustomed to camping out should always have straw put on the ground under the tent carpet.

For arms—the plainer the better—1 central fire D.B. hammer 12-bore gun, 1 C.F.D.B. express rifle, 500 bore. Empty 12-bore cartridges, Curtis & Harvey's No. 6 powder, and shot of all kinds can be purchased in any ordinary station.

For medicine, plenty of quinine in 3- or 5-grain "tabloids" or pills (to be taken before or after food whenever a chill or feverishness is felt), a bottle or two of chlorodyne, and two boxes of Cackle's pills. If not needed by the traveller, the pills may be useful to give to servants or villagers.

Books

The most accurate information on all subjects connected with India, up to 1907, is to be found in the first four volumes of the *Imperial Gazetteer of India, 1907*—Descriptive, Historical, Economic, and Administrative—each of which can be bought separately for 6s. A full bibliography will be found under each section in these volumes.

Some books are specially mentioned here (classified):—

GENERAL

- B. H. Baden-Powell, (1) *Land Revenue and Tenure in British India*. (2) *The Indian Village Community*.
- J. Bartholomew, *A Literary and Historical Atlas of Asia*.
- General Sir G. Chesney, *Indian Polity*.
- H. Compton, *Indian Life in Town and Country*.
- Elwin, Rev. E. F., *India and the Indians*.
- J. Finnemore, *Homes in Many Lands, India*.
- Hon. J. Fortescue, *Narrative of the Visit to India of Their Majesties*.
- Lovat Fraser, *India under Curzon and After*.
- Sir J. Bampfylde Fuller, (1) *Studies of Indian Life and Sentiment*. (2) *The Empire of India*.
- The Historical Record of the Imperial Visit to India, 1911*.
- Sir T. W. Holderness, *Peoples and Problems of India*.
- Sir T. H. Holdich, *India* ("Regions of the World" series).
- E. W. Hopkins, *India: Old and New*.
- Sir W. W. Hunter, *The India of the Queen*.
- Sidney Low, *A Vision of India*.
- Mortimer Menpes and Flora A. Steel, *India*.
- H. P. Mody, *The Political Future of India*.
- Sir T. Morison, (1) *The Economic Transition in India*. (2) *Imperial India*. (3) *Indian Industrial Organisation*.
- Max Müller, (1) *India, what it can teach us*. (2) *The Six Systems of Indian Philosophy*.
- Arley Munson, *Kipling's India*.
- Sir T. Raleigh, *Lord Curzon in India*.
- Sir Stanley Reed, *The Indian Year Book* (annual).
- Sir J. D. Rees, (1) *Modern India*. (2) *The Real India*.
- Sir H. H. Risley, *The People of India*.
- J. H. Rivett-Carnac, *Many Memories*.
- Rousset, *India of the Rajas*.
- Miss Scidmore, *Winter India*.
- Sir John Strachey, *India*.
- The "Times," *India and the Darbar*.
- M. Townsend, *Asia and Europe. Provincial Gazetteers*.

ART

- Sir G. Birdwood, *Industrial Arts of India*.
- A. K. Coomaraswamy, (1) *Indian Paintings*. (2) *Rajput Paintings*.
- James Fergusson, *History of Indian and Eastern Architecture*, revised edition by Dr Burgess and R. P. Spiers.
- J. Fergusson and J. Burgess, *The Cave Temples of India*.
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¹ For *Ceylon Cities*, see CEYLON list.

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 E. C. Stuart Baker, *The Indian Ducks and their Allies.*
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Army Lists; Civil Lists; Directories (Thacker; "Times of India": Asylum Press); *Postal Guide; The Traveller's Companion* (Calcutta). Some of these will be found in all Clubs and at most large Hotels. Many of the railways have published guides with capital illustrations, which are well worth buying as mementoes of a visit to India. Special information in detail regarding any place in India can be found in the *Provincial Gazetteers*: there is a separate volume for each district.
The Motor Union Insurance Road Map of India.

(2) VOYAGE FROM ENGLAND TO GIBRALTAR,
MARSEILLES, MALTA, PORT SAID, THROUGH
THE SUEZ CANAL AND RED SEA TO ADEN
AND BOMBAY

The principal steamer lines running from England to India are the P. & O.¹ (Mail) and British India Companies (now combined under the direction of Lord Inchcape) to Bombay, Colombo, Madras, and Calcutta; the Bibby, Ellerman (City and Hall) and Anchor Lines; the Messageries Maritimes from Marseilles, and the Rubattino from Genoa; while boats of the Orient Company run twice a month to Colombo, only 38 hours by rail from Madras. For a table of comparative rates of steamer fares see p. clxxiv.

The comfort of the voyage depends much on the choice of the steamer, and the cabin. The largest steamers, as having less motion, and more room on deck, are usually preferable to smaller vessels. In going through the Red Sea to India the outer cabins on the port side are the best. On the return voyage the starboard cabins are better, but the difference is not material. The P. & O. and British India provide electric fans in the cabins, free of charge.

On going on board it is well to arrange for the passenger's seat, or his party's seats, at table as soon as possible, as after the first dinner at sea, when seats have been assigned, it is difficult to make a change. They are usually allotted by the chief steward.

It is usual to give a present of 10s. to the cabin steward, and 10s. to the waiter at table. On the steamers of the P. & O. and British India Companies passengers are entitled to medical attendance by the ship's surgeon, at a fixed charge of 5s. per visit for 1st, and 2s. 6d. per visit for 2nd-class passengers.

The timings of the P. & O. mail steamers are usually as follows:—

	DAYS AFTER LEAVING			
	London	Marseilles		Brindisi
Gibraltar	4
Marseilles	6	{ 23 hours by special train from London. Every Thursday at 11 A.M.		...
Brindisi (suspended during the War)	...		{ 2 days by special train from London. Every Friday, 9 P.M.	
Port Said	11	4		2½
Aden	16	9		6½
Bombay	20½	13½		11½

¹ P. & O. and British India Offices: 122 Leadenhall Street, E.C. 3, and 17 Northumberland Avenue, W.C. 2, London. Orient S. N. Co.: 3 Fenchurch Avenue, E.C. 3, Cockspur Street, W. Offices of Thos. Cook & Son (General Passage Agents): Ludgate Circus, E.C., Piccadilly W., and branches.

The time occupied from London by the P. & O. and British India steamers running to Calcutta, and P. & O. steamers to China and Japan, is usually :—

Malta,	8 days.	Aden,	17 days.	Calcutta,	31 days.
Port Said,	11 „	Colombo,	25 „	Hongkong,	38 „

The Messageries boats sail from Marseilles, where also the P. & O. and the Orient Line steamers (from London) touch. The British India and Orient Pacific usually call at Naples also, the former also calling occasionally at Genoa. The P. & O. mail steamers start from the Tilbury Dock, and the intermediate steamers from the Royal Albert Docks, London. These outward steamers are, under normal conditions, nearly always in advance of their scheduled time after leaving Port Said.

Travelling by sea from England, through the Bay of Biscay, results in a saving of a few pounds as compared with the expense of the overland route *viâ* Marseilles, although it adds a few days to the voyage; good sailors may prefer the greater quiet of sea life to the scurry of a long overland journey. The first place sighted is generally **Cape la Hague**, or **Hogue**, on the W. coast of the Cotentin, in France, off which, on the 19th of May 1692, Admiral Russell, afterwards Earl of Orford, defeated De Tourville, and sunk or burned sixteen French men-of-war. Then **Cape Finisterre** (*finis terre*), a promontory on the W. Coast of Galicia, in Spain, and in N. lat. 42° 54', and W. long. 9° 20', will probably be seen, off which Anson defeated the French fleet in 1747. The next land sighted will be, perhaps, **Cape Roca**, near Lisbon, and then **Cape St Vincent**, in N. lat. 37° 3', W. long. 8° 59', at the S.W. corner of the Portuguese province Algarve, off which Sir G. Rodney, on the 16th January 1780, defeated the Spanish fleet, and Sir J. Jervis won his Earldom on the 14th of February 1797, and Nelson the Order of the Bath, after taking the *S. Josef* and the *S. Nicholas*, of 112 guns each. This Cape has a fort upon it, and the white cliffs, 150 feet high, are honey-combed by the waves, which break with great violence upon them. From the last three Capes steamers are signalled to Lloyd's. Just before entering the Straits of Gibraltar, **Cape Trafalgar**¹ will also probably be seen in N. lat. 36° 9', W. long. 6° 1', immortalised by Nelson's victory of the 21st of October 1805. **Tarifa** is next passed, and **Gibraltar** then comes in sight. The table of distances (p. xl) is from the pocket-book of the Peninsular and Oriental Steam Navigation Company. This little book, costing only 2s. 6d., can be highly recommended.

¹ Tarf-al-gharb, the side of the West.

TABLE OF DISTANCES BETWEEN THE VARIOUS PORTS ACCORDING TO THE ROUTES TAKEN BY THE STEAMERS OF THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY.

London (if via Plymouth add 50)										
	295	Plymouth								
	1309	1054	Gibraltar							
	2003	1748	694	Marseilles						
	2290	2035	981	—	Malta					
	—	—	—	—	—	Brindisi				
Via Malta	Via Marseilles									
	3225	3511	3256	2202	1508	935	930	Port Said		
	3268	3554	3299	2245	1551	978	973	43	Ismailia	
	4620	4906	4651	3597	2903	2330	2325	1395	1352	Aden
	6284	6570	6315	5261	4567	3994	3989	3059	3016	1664 Bombay
	6713	6999	6744	5690	4996	4423	4418	3488	3445	2093 875 Colombo
	7973	8259	8004	6950	6256	5683	5678	4748	4705	3353 2135 1260 Calcutta

GIBRALTAR.—As the steamers rarely stop for more than a few hours, passengers will not find time for anything beyond a walk in the town and lower fortifications. The place is a good one to buy tobacco, as there is no duty and it is cheap. There are steamers from Gibraltar three times a week to Tangier, and a number of times daily to Algeciras,¹ the terminus of the Spanish railway.

Gibraltar was reckoned as one of the Pillars of Hercules, the African pillar being Abyla, near Ceuta. It was taken from the Visigoths in 711 A.D. by Tarik Ibn Zayad—after whom it was called Jabal al Tarik = Gibraltar—and retaken 1309, but not finally wrested from the Moors till 1503. In 1704 it was taken by the English, and sustained several sharp sieges by the French and Spaniards between that date and 1779. In the latter year commenced the memorable siege which lasted four years, and ended by the repulse of the combined fleets of France and Spain by the garrison under General Eliott, Lord Heathfield of Gibraltar, 1779-83. Since that time it has remained an uncontested possession of the English. Proposals to restore it to Spain have been made from time to time, but have never met with general approval.

As the steamer rounds Point Carnero, the spacious, but exposed bay, 6 m. wide and 10 m. deep, is entered, and a fine view is obtained of the vast rocky promontory, which on the N. face rises in a perpendicular precipice 1200 ft. high, and ascends in the centre to 1408 ft. It is 3 m. in length, and from $\frac{1}{2}$ m. to $\frac{3}{4}$ m. in breadth; and is joined

¹ Al-jazira, a peninsula, or island.

to the mainland by a low, sandy isthmus, $1\frac{1}{2}$ m. in length. On all sides but the W. it is steep and rugged, but on that side there is a general slope of from 200 to 300 ft. from the rock down to the sea. The approach from the W. reveals three high points—N. is the **Rock Gun**, or **Wolf's Crag**, 1337 ft. ; in the centre the **Upper Signal Station**, or **El Hacho**, 1255 ft. high ; and S. is **O'Hara's Tower**, 1408 ft. Here the rock descends to **Windmill Hill Flats**, a level plateau $\frac{1}{2}$ m. long, which ends in a still lower plateau from 100 to 50 ft. above the sea, called **Europa Flats**. The new mole, landing-place, and dockyard, occupy the west side from opposite O'Hara's Tower to the Signal Station, and the town lies above them from opposite the latter point to the Rock Gun Peak. The population of the place amounts to 27,000, and the garrison to between 5000 and 6000. The hotels are situated in West Port Street, which, with its continuations, forms the main thoroughfare of the place from the **Land Port** to the **South Port Gate**.

When passengers land at Gibraltar passports are exacted from all but British subjects, and sketching is strictly prohibited. The hour of evening gun-fire varies according to the time of year ; a few minutes later all gates are shut till sunrise, though up to a later fixed hour entrance is permitted with certain police formalities.

The Main Street may be followed as far as the **Alameda**, outside the South Port ; this was the parade-ground until 1814, when Sir George Don made a lovely garden of it. A column brought from the ruins of Lepida is surmounted by a bust of the Duke of Wellington, and there is also a bust of General Eliott, the hero of the great siege 1779-83. Half-way down the street is the **Exchange**, with the **Club House** to the W. The English **Cathedral Church** of the Holy Trinity, built in the Moorish style in 1832, stands near these, and the Governor's residence farther on, which once belonged to Franciscan friars, is still called "The Convent." On the left, outside the South Port Gate, is a small cemetery, in which many who died of wounds received at the Battle of Trafalgar are buried ; and farther South, below the Alameda, is the dockyard. An upper and a lower road lead from here to the Windmill Hill and Europa Flats. Beyond these, on the E. shore, is the summer residence of the Governor, called "The Cottage," built by General Fox.

Those who stay here several days can explore the Heights and fortifications of Gibraltar, for which a special order from the Military Authorities is necessary. From the Rock Gun there is a fine view of the Ronda Mountains and the Sierra Nevada ; the **Moorish Castle** (746 A.D.) is on the way to it, and under a massive tower, called the Torre de Omenaga, are some well-constructed tanks. Beyond are the wonderful galleries in the North face excavated

could be swept by the guns of **St Angelo**, which is a fort behind **St Elmo**; on the E. side here is the town called **Citta Vittoriosa**. The mail steamers are moored in the quarantine harbour; the charge for landing is one shilling per head. On landing a long flight of steps is ascended to the **Strada San Marco**, which leads to the principal street, **Strada Reale**, $\frac{1}{2}$ m. long, in the town of Valetta, so called from Jean de La Valette, Grand Master of the Knights of St John of Jerusalem, who built it after the Turkish armament sent against Malta by Sultan Sulaiman II. had been repulsed. The foundation stone was laid on the 28th of March 1566, and the whole town, designed by one architect, Girolamo Cassar, was completed in May 1571.

Left of the **Strada Reale** is **St John's Cathedral**—a remarkable church, both historically and architecturally—designed by Cassar. The floor is paved with slabs bearing the arms of scores of knights who have been interred in this church. In the first chapel on the right the altar-piece represents the beheading of John the Baptist, and is by M. Angelo Caravaggio. In the next chapel, which belonged to the Portuguese, are the monuments of Manoel Pinto and Grand Master Manoel de Vilhena, the latter of bronze. The third, or Spanish chapel, has the monuments of Grand Masters Perellos and N. Cottoner, and two others. The fourth chapel belonged to the Provençals. The fifth chapel is sacred to the Virgin, and here are kept the town keys, taken from the Turks. On the left of the entrance is a bronze monument of Grand Master Marc Antonio Sondadario. The first chapel on the left is the sacristy. The second chapel belonged to the Austrians, the third to Italians, containing pictures, ascribed to Caravaggio, of St Jerome and Mary Magdalene. The fourth is the French chapel, and the fifth the Bavarian, and hence a staircase descends to the crypt, where are the sarcophagi of the first Grand Master who ruled in Malta, L'Isle Adam, and of de La Valette and others.

The **Governor's Palace**, formerly the Grand Master's, close to the **Strada Reale**, is a noble range of building, containing marble-paved corridors and staircase, and many portraits, and armed figures carrying the shields of all the Governors from the first Grand Master to the present day. The armoury is full of interesting relics, including the original deed granted to the Knights of St John of Jerusalem by Pope Pascal II. in 1126, and the deed when they left Rhodes in 1522. The **Library**, close to the Palace, contains 40,000 volumes and some Phœnician and Roman antiquities. The highest **battery** commands a fine view of both harbours and of the fortifications. There are several statues of Grand Masters and Governors in the walk on the ramparts. The **Opera House**, the **Bourse**, the **Courts of Justice**,

once the Auberge d'Auvergne, and the Union Club, once the Auberge de Province, and the statues of L'Isle Adam and de La Valette, are in the Strada Reale. The Auberge d'Italie, to the E. of the S. end of this street, is the Royal Engineer's office, and the Auberge de Castille, near it, has become the Headquarters of the Artillery; the Auberge de France, in the Strada Mezzodi, is now the house of the Comptroller of Military Stores, and the Auberge d'Aragon the residence of the General of the Garrison. The Auberge d'Allemagne was removed in order to erect St Paul's Church on its site. The Anglo-Bavarian Auberge is the Headquarters of the regiment stationed at St Elmo. In front of the Auberge de Castille are the Piazza Regina and Upper Barracca, affording splendid views of the great harbour. **The Military Hospital** has the largest room in Europe, 480 ft. long, erected in 1628 by Grand Master Vasconcelos. Below the Military Hospital is the Civil **Hospital for Incurables**, founded by Caterina Scappi in 1646.

One mile beyond the Porta Reale and the station of the little railway to Civita Vecchia is the Governor's country Palace of **St Antonio**, with a lovely garden. About $\frac{1}{2}$ m. farther to the S.W. is **Citta Vecchia**, which stands on a ridge from 200 to 300 ft. high, affording a view over nearly the whole island. There is a fine church here, St Paul's, and near it are some curious catacombs. **St Paul's Bay** lies at the N.W. extremity of the island; there is a statue of bronze erected on an islet at its mouth. The Carthaginian or Phœnician ruins at **Hagier Chem**, properly Hajar Kaim, "upright stone," near the village of Casal Crendi, can be visited on the way to it. These ruins, excavated in 1839, consist of walls of large stones fixed upright in the ground, forming small enclosures, connected with one another by passages, and all contained within one large enclosure. The building is thought to have been a temple of Baal and Astarte. The main entrance is on the S.S.E., and a passage leads from it into a court, on the left of which is an altar, with the semblance of a plant rudely sculptured on it. Similar remains are found in other parts of Malta and in Gozo.

Malta is said to have been occupied by the Phœnicians in 1500 B.C. and by the Greeks in 750 B.C. The Carthaginians got possession of it in 500 B.C., and the Romans took it towards the close of the Second Punic War. The Goths and Vandals invaded it in 420 A.D. In 520 A.D. Belisarius made it a province of the Byzantine Empire, the Moslems conquered it in 730 A.D., and Count Roger, the Norman, captured it in 1100 A.D. It then passed to Louis IX., to the Count of Anjou, and to the Kings of Castile, and then to Charles V., who gave it, in 1530, to the Knights Hospitallers of St John of Jerusalem. On 18th May 1565 the Turks attacked St Elmo, St Angelo, and

Sanglea, but the siege was raised on the 8th of September (see Major Whitworth Porter's *History of the Knights of Malta*, Longmans 1858). The Knights had their own mint, fleet, and army, and accredited ambassadors to foreign Courts. In the archives are letters from Henry VIII., Charles II., and Anne, addressed to them as Princes. On the 7th of September 1792 the French Directory commanded the Order to be annulled, and seized all its French possessions. On the 7th of June 1798 Bonaparte arrived with a fleet of 18 ships of the line, 18 frigates, and 600 transports, and Malta was surrendered. A tree of liberty was planted before the Palace, the decorations of the knights were burned, and the churches, palaces, and charitable houses at Valetta and Citta Vecchia were pillaged. On the 2nd of September 1798 a general revolt took place, and Nelson blockaded Valetta; and on the 5th of September 1800 their commander, General Vaubois, surrendered.

EGYPT, PORT SAID, AND THE SUEZ CANAL.—The land about Port Said is so low that the approach to the harbour would be difficult were it not for a lighthouse, 184 ft. high above sea-level, built of concrete, which stands a short distance inland to the right of the harbour, close to the W. mole, and shows an electric light flashing every 10 seconds and visible 20 m. off. The harbour is formed by two converging breakwaters, 1530 yds. apart at the shore end and 540 yds. apart at the entrance; they are built of concrete. The Western breakwater is at present 3000 yds. long (540 yds. thereof do not show above the water-line); but extension works are in progress, and within a few years the total length will be 5450 yds. The Eastern breakwater is now 2600 yds. long. The depth of water at the entrance exceeds 33 ft. Near the S. end of the West jetty is a bold statue of the illustrious founder, Ferdinand de Lesseps, with the motto "Aperire terram gentibus." Port Said town is modern, and since 1890 it has been much improved, and is now a very important coaling-station. The population is 50,000, of which 10,000 are Europeans (census of 1907). The Canal Company's offices form a conspicuous pile of buildings on the embankment that separates the Dock du Commerce from the Dock de l'Arsenal. Opposite the anchorage on the Marina is the French pilots' office, where the draught, breadth, length, and tonnage of each ship entering the canal is noted. The wooden plan of the canal, formerly used to indicate, by pegs and flags, the passage of every vessel, has been superseded by diagrams, which show the position of each ship and of the whole traffic in the canal. Express trains leave Port Said thrice daily for Ismailia, Suez, and Cairo, taking $4\frac{1}{4}$ to 5 hrs. 10 mins. to Cairo. The principal hotels at Port Said are the Eastern Exchange, Savoy, Continental, and Metropole. The P. & O. and British India

Companies' Agent at Port Said is Mr W. Broatch, at the offices of the English Coaling Company Limited. Messrs Cook and the Anglo-American Nile Company and the principal Agents in India have representatives at Port Said. On the high ground in the immediate neighbourhood of Ismailia there exists a fine hospital (Hôpital Saint-Vincent de Paul) built by the Canal Company.

The Canal,¹ formally opened in November 1869, is about 100 statute m., or 86 nautical m., in length. The distance between Port Said and Ismailia by the Canal is 49 statute m., or 42 nautical m. As far as Ismailia it runs due N. and S.; it then bends to the E. for about 35 m., and is again almost straight for the last 20 m.

The following are the dimensions of the Canal, which are constantly being increased :—

Width at the water-line	310 ft. minimum
„ on the floor of the Canal, at a depth of 33 ft.	148 ft. „
Depth (dredging in progress up to 36 ft.)	31 ft. „

Every few miles there is a gare, or station, and a siding with signal posts, by which the traffic is regulated according to the block system. Every year the navigation is rendered easier by the construction of additional sidings, and by traffic at night by electric light; the average duration of transit in 1916 was 19 hrs. 12 min. The maximum speed authorised is $5\frac{1}{2}$ nautical m. an hour, except in the large Bitter Lakes, where ships may go full speed.

The number of passages through the Canal in 1916 was 3110, with a net tonnage of 12,325,347 tons; of this number 79.4 per cent. were British. The Suez Canal tonnage, in 1915 and 1916, of Germany and Austria, was *nil*. The percentages of total and British tonnage passed through the Canal in 1916 by the P. & O. and British India Companies were 12.1 and 15.2 respectively. The rate of tonnage dues for laden passenger and cargo ships was reduced to 6 frs. 75 cm. in 1912, and further reduced to 6 frs. 25 cm. from 1st January 1913; in 1916 it was 7 frs. 25 cm. per net ton (being the measurement ton of 100 cubic ft.). Ships in ballast are allowed a reduction of 2 frs. 50 cm. on the full transit rate. On passengers transit dues are charged at the rate of 10 frs. for each person above 12 years of age and 5 frs. for each between 3 and 12. The gross transit receipts earned in 1916 were 76,119,861 frs. (£3,020,600). As improvements have been from time to time

¹ For a detailed History of the Canal, see *Handbook of Egypt*, John Murray.

introduced, the average tonnage of ships passing through the Canal has increased thus :—

	Gross tonnage.	Net tonnage.
In 1870	1348 tons	898 tons.
In 1916	5432 tons	3963 tons.

The number of passengers carried through the Canal in 1916 was 283,030, of whom 235,441 were classed as military. The share capital of the Canal Company is 200,000,000 frs. (£8,000,000). The cost of the Canal has been—up to 31st December 1869, 369,000,000 frs. (£14,760,000); up to 31st December 1916 (including all improvement works), 700,000,000 frs. (£27,777,700). Owing to considerable reduction of traffic through the War, transit rates were raised to 6.75 frs. from 1st April 1916; 7.25 from 5th October 1916; 7.75 from 1st January 1917; 8.50 from 1st July 1917. The Canal route saves about two-fifths of the length of the route by the Cape of Good Hope from the principal ports of Europe to Bombay, and about one quarter of the route to China.

On the W. of the Canal, as far as **Al Kantara** (the Bridge)—that is, for about one-fourth of the way—there is a broad expanse of water, called **Lake Manzala**, and for the rest of the distance to the W. and the whole distance to the E., a sandy desert, on which foxes, jackals, hyenas, wander at night. 20 m. from Port Said the old Pelusiatic branch of the Nile is crossed, and 8 m. to the E. are the ruins of the ancient city of Pelusium. At **Al Kantara**, 27 m. from Suez, the Canal intersects the caravan-track between Egypt and Syria, and is crossed by a flying bridge. 10 m. to the W. is **Tel Dafana**, the site of Daphne, the Taphnes of Judith, 1, 9. At 2 m. S. of Al Kantara the Canal enters the **Lake Balla**, and after 12 m. reaches the promontory **Al Fardana**, which it cuts through. Thence, after $4\frac{1}{2}$ m., it reaches **Al Gisir**, the highest ground in the isthmus, 65 ft. above sea-level. There was a great camp here when the works were in progress, and a staircase of 100 steps led down to the Canal. Beyond this, near the entrance to **Lake Timsa**, just half-way between Port Said and Suez, a small channel joins the maritime Canal and the Fresh-Water Canal. The difference of level is 17 ft., which is overcome by two locks. A steam-launch comes to meet steamers in the lake, and land passengers for

ISMAILIA, population 4000, which once had much of the importance and traffic that formerly belonged to Suez, as the mails and passengers for Egypt were landed here—Hotel Vittoria, Hotel des Voyageurs; but is likely to decline, owing to the opening of the railway to Port Said. From the landing-place a broad road lined

with trees traverses the town from E. to W. In the W. quarter are the station, the landing-quays of the Fresh-Water Canal, and large blocks of warehouses, and beyond them the Arab village. In the E. part are the houses of the *employés*, the residence of the Khedive, which was used as a military hospital during the English occupation of Ismailia in 1882, and the works by which water is pumped from the Fresh-Water Canal to Port Said.

The course of the Canal through **Lake Timsa**, or Bahr al Timsa, "The Lake of the Crocodile," to which the Red Sea is believed to have formerly extended, is about $2\frac{1}{2}$ m., and is marked by buoys. After 4 m. the Canal reaches the higher ground of Tussum, where the level of the desert is 20 ft. above the sea, and here the first working encampment in the S. half of the isthmus was formed in 1859. 3 m. to the S. is **Serapeum**, where the level is from 15 to 25 ft. above the sea, so called from some remains of a temple of Serapis, lying 4 m. to the W. $1\frac{1}{2}$ m. from this the Canal enters the **Bitter Lakes**, where the course is again buoyed. These lakes are the ancient Gulf of Heræopolis, and some authorities hold that the passage of the Israelites was through this. At the N. and S. ends of the principal lake is an iron lighthouse 65 ft. high, on a solid masonry base. After 86 m. from Port Said the deep cutting of Shaluf is reached, in which is a band of sandstone, with layers of limestone and conglomerate, in which fossil remains of the shark, hippopotamus, tortoise, and whale, have been found. From this to the Suez mouth of the Canal is $12\frac{1}{2}$ m.

All the way from Ismailia the banks are fringed with vegetation, and the plain on either side is dotted with bushes. There is a little fishing in the Canal for those who like the amusement, and at Suez there is a great variety of fish.

SUEZ.—The chief historical interest of Suez is derived from its having been long supposed to be the spot near which the Israelites crossed the Red Sea under the guidance of Moses and where the Egyptian army was drowned, but modern criticism tends to place the scene farther N. In the early years of the 18th century Suez was little better than a small fishing-village, galvanised now and then into commercial life by the passage of caravans going to and fro between Asia and Egypt. But in 1837, owing to the exertions of Lieutenant Thomas Waghorn (1800-1850), the route through Egypt was adopted for the transit of the Indian mail, and in 1840 the P. & O. Company began running a line of steamers regularly between India and Suez. This was followed in 1857 by the completion of a railway line from Cairo (since removed), and Suez soon began to increase in size and importance. It suffered, however, from the want of fresh water, until the completion (1863) of the Fresh-Water Canal to Suez brought an

abundance of Nile water to the town; and the various works in connection with the Suez Canal, the new quays, the docks, etc., raised the population to 15,000. With the completion of the Canal the activity of the town decreased, and since the transfer of the mails from it the place has been almost deserted, and the fine quays and warehouses are unused, as steamers now usually anchor in the Roads. There is a railway line to Ismailia and so to Cairo and Port Said.

The **Old Town** itself offers few points of interest. To the N. of the town are the storehouses of the P. & O. Company, the lock which terminates the Fresh-Water Canal, and the *English Hospital*; and on the heights above is the chalet of the Khedive, from which there is a magnificent view. In the foreground is the town, the harbour, the roadstead, and the mouth of the Suez Canal; to the right, the range of **Gebel Attaka**, a most striking and beautiful object, with its black-violet heights hemming in the Red Sea. Away to the left, though considerably farther S., are the rosy peaks of the Mount Sinai range; and between the two, the deep blue of the gulf.

EXCURSION TO WELLS OF MOSES.—By those landing for Egypt at Suez a pleasant excursion may be made to the **Wells or Fountains of Moses, Ain Musa**. It will occupy, according to the route taken and the time spent at the place, from half a day to a day. The shortest way is to take a sailing-boat, or one of the small steamers that ply between the town and the harbour, as far as the jetty, which has been built out into the sea to communicate with the new Quarantine station lately established on the shore of the gulf for the reception of the pilgrims on their return from Mecca. From this point to Ain Musa the distance is not much over a mile; if donkeys are required between the jetty and the Wells, they must be sent from Suez. The other plan is to cross over in a boat to the old Quarantine jetty, about $\frac{1}{2}$ m. from the town, either taking donkeys in the boat or sending them on previously, and then to cross the Suez Canal by the ferry used for the passage of caravans between Arabia and Egypt, and ride along the desert to the Wells. Or the boat may be taken down to the entrance to the Canal, and then up it a short way to the usual starting-point for the Wells. Either of these routes will take from three to four hours. The sums to be paid for boats and donkeys had better be strictly agreed upon beforehand. Visitors who intend spending the day at Ain Musa should take food with them. This excursion may be combined with a visit to the docks, by landing there on returning.

The "Wells" are a sort of oasis, formed by a collection of springs, surrounded with tamarisk bushes and palm-trees. Since it has

become, as Dean Stanley calls it, "the Richmond of Suez,"—a regular picnicking place for the inhabitants of that town—some Arabs and Europeans have regularly settled in it, and there are now a few houses, and gardens with fruit-trees and vegetables. The water from the springs has a brackish taste. Most of them are simply holes dug in the soil, which is here composed of earth, sand, and clay; but one is built up of massive masonry of great age. Though not mentioned in the Bible, its position has always caused it to be associated with the passage of the Red Sea by the Israelites, and tradition has fixed upon it as the spot where Moses and Miriam and the Children of Israel sang their song of triumph.

THE RED SEA.—A fresh breeze from the N. generally prevails for two-thirds of the voyage down the Red Sea, and is during the winter months succeeded by an equally strong wind from the S. for the rest of the way. During the summer the wind from the N. blows throughout the sea, but is light in the southern half, and the heat is great. The **Sinaitic Range** is the first remarkable land viewed to the E., but Sinai itself, 37 geographical m. distant, can be seen only for a few minutes.

The Red Sea extends from the head of the Gulf of Suez to the Strait of Bab-el-Mandeb, about 1300 m., and its greatest width is about 200 m. At Ras Muhammad it is split by the peninsula of Sinai into two parts—one the Gulf of Suez, about 150 m. long, and from 10 to 18 m. wide, and the other the Gulf of Akaba, about 100 m. long, and from 5 to 10 m. wide.

Wherever seen from the sea the shores of the Red Sea present an appearance of absolute sterility. A broad, sandy plain slopes inappreciably to the foot of the mountains, which are in most parts a considerable distance inland. The ordinary mail-steamer's track, however, lies down the centre of the sea, and little more than the summits of the distant bare and arid mountains will be seen.

Throughout the Red Sea enormous coral reefs run along the coasts in broken lines parallel to the shores, but not connected with them. They usually rise out of deep water to within a few feet of the surface. A navigable channel, from 2 to 3 m. wide, extends between them and the E. coast, and a narrower one on the W. coast. The whole sea is in course of upheaval. The former seaport of Adulis, in Annesley Bay, near Massowa, is now 4 m. inland.

The tides are very uncertain. At Suez, where they are most regular, they rise from 7 ft. at spring to 4 ft. at neap tides.

During the hottest months—July to September—the prevalence of northerly winds drives the water out of the Red Sea. The S.W.

monsoon is then blowing in the Indian Ocean, and the general level of the Red Sea is from 2 to 3 ft. lower than during the cooler months, when the N.E. monsoon forces water into the Gulf of Aden and thence through the Strait of Bab-el-Mandeb.

After leaving Suez the lighthouses seen are Zafarana and Ras Gharib, both on the W. coast before Tor is reached. Then follows the light on Ashrafi, just inside the mouth of the Gulf of Suez, and that on Shadwan, just S. of it. The light on *The Brothers* is nearly due E. of Kosseir. The Daedalus Reef, small and dangerous, lies in mid-channel in lat. 25°, and was a source of dread before the light was erected. The last light is on Perim Island, in the Bab-el-Mandeb.

Below Kosseir (lat. 26°)—the ancient Leucos Limen (White Harbour) and the port of Upper Egypt—and Ras Benas (lat. 24°), near which was the port of Berenice, **PORT SUDAN**, 870 m. S. of Suez: a new port, with latest appliances, opened by Lord Cromer for the Sudan Government in 1907. It is the headquarters of a Province, and possesses a comfortable hotel (expensive), managed by the Sudan Government Railways, reached from the quayside by five minutes' row across the harbour. There is a fine Government Hospital. The Eastern Telegraph Company's office is one minute's walk from the hotel, and the National Bank of Egypt is in the town. The railway journey to Khartoum (*via* Berber) takes about twenty hours by express train. 30 m. S. of Port Sudan lies **SUAKIN**, in lat. 19°, on the coast. It is the centre of native trade between Arabia and the Sudan; from it there is a railway line connecting with the line between Port Sudan and Berber. It is the scene of the two English expeditions of 1884, 1885, neither of which led to any result, and in 1896 was again held for the Khedive of Egypt by our troops, which caused a diversion of Osman Digna's forces, thus enabling the Khedive's troops, under Sir Herbert (the late Earl) Kitchener, the more easily to reconquer the North Sudan. The principal tribes in the vicinity are the Hadendowa and Amarar.

About 120 m. N. of Suakin, on the Arabian coast, is **Jiddah**, the seaport of Mecca (Makka), 60 m. E. The population, including surrounding villages, is about 40,000. English and other steamers call here frequently. The anchorage is 3½ m. from the shore. The town is square in shape, enclosed by a wall with towers at intervals, and on the sea-face by two forts. There is a good street parallel to the sea. The population is most fanatical, and Europeans landing must behave in all respects cautiously. There are three entrances to the town on the sea side, but the central one at the jetty is the only one in ordinary use. The gate on the S. side of the town is seldom opened, that on the N. is free to all, but

the E. or Mecca gate, which formerly was strictly reserved for Muhammadans, should be approached with caution. The only sight of the town is the so-called Tomb of Eve, which lies to the N. This is a small mosque in the centre of two long, low walls 140 ft. in length, which are supposed to enclose the grave. The antiquity of the tradition is unknown. Jiddah was bombarded by the British in 1858 in retribution for a massacre of the Consul and other British subjects by the population. Over 20,000 pilgrims proceed on the Hajj (pilgrimage to Mecca) every year from India.

HODEIDA, also on the E. coast 200 m. N. of the Straits of Bab-el-Mandeb, in lat. $14^{\circ} 40'$ N., has a population of about 33,000. The anchorage is $3\frac{1}{2}$ m. from the shore. European steamers call weekly or oftener. **Mocha**, which this place has supplanted as a commercial port, is 100 m. S. Hodeida has well-built houses and an amply-supplied market, and its mosques, with fine domes and minarets, give it a handsome appearance.

The island of **Perim** occupies the narrowest part of the Strait of Bab-el-Mandeb ("the Gate of Tears"). It is distant $1\frac{1}{2}$ m. from the Arabian coast and 9 to 10 m. from the African. The average width is $1\frac{1}{2}$ m., the greatest length $3\frac{1}{2}$ m. The formation is purely volcanic, and consists of long, low hills surrounding a capacious harbour about $1\frac{1}{2}$ m. long, $\frac{1}{2}$ m. in breadth, with a depth of from 4 to 6 fathoms in the best anchorages. The highest point of the island is 245 ft. above sea-level. All endeavours to find water have failed, and but little is procurable from the mainland near. There are water tanks that used to be supplied from Aden, but a condensing apparatus is found the most convenient means of supply. The British are the only nation who have ever permanently occupied Perim. Albuquerque landed upon it in 1513, and erected a high cross on an eminence, and called it the island of *Vera Cruz*, by which name it is shown on old Admiralty charts. Afterwards it was occupied by pirates, who in vain dug for water. In 1799 the East India Company took possession of it, and sent a force from Bombay to hold it and prevent the French then in Egypt from passing on to India, where it was feared they would join Tipu Sultan. The lighthouse on the highest point was completed in 1861, and since then two others have been built on the shore. The garrison, furnished from Aden, occupies a small block-house for the protection of the lighthouse and coaling-stations. Steamers usually pass to the E. of the island near the Government boat harbour. The Western side of the large inner harbour has been assigned to the Perim Coal Company, who have expended £120,000 in making the place one of the most perfect coaling and salvage stations in the East. The powerful salvage

steamers are always ready to render assistance to vessels in distress.

Aden, lat. $12^{\circ} 46'$, long. E. $44^{\circ} 58'$, situated on the E. promontory of a bay 8 m. long and 4 m. deep, was long held by the Turks, who captured the port from the Arabs. Marco Polo, the Venetian, visited Aden on his return from his travels in China. He records: "And it is a fact that when the Soldan of Babylon went against the city of Acre" (in A.D. 1291) "this Soldan of Aden sent to his assistance 30,000 horsemen and 40,000 camels, to the great help of the Saracens and the grievous injury of the Christians. He did this a great deal more for the hate he bears the Christians than for any love he bears the Soldan." This was the Mameluke Sultan of Egypt, Malik Ashraf Khalil. On the 18th February 1513 Albuquerque sailed from India with twenty ships for the conquest of Aden. In the assault on the fortress their ladders broke, and although the Portuguese took "a bulwark which guarded the port with thirty-nine great pieces of cannon," they were obliged to withdraw after a four days' siege. The first English vessel visited Aden in 1619.

Aden was taken from the Arabs by the British on the 19th of January 1839.¹ It was attacked by the Abdalis and Fadhliis on the 11th of November in that year, but they were repulsed with the loss of 200 killed and wounded. The united Arab tribes made a second attack on the 22nd of May 1840, but failed after losing many men. On the 5th of July 1840 a third attack took place, but the assailants, Abdalis and Fadhliis, were driven back and lost 300 men. In January 1846 Saiyad Ismail, after preaching a *jihad*, or religious war, in Mecca, attacked this place, but was easily repulsed. In 1857 'Ali bin Muhsin, Sultan of the Abdalis, gave so much trouble that Brigadier Coghlan, Commandant at Aden, was compelled to march against him in 1858, when the Arabs were routed with a loss of from thirty to forty men, and with no casualties on our side. In December 1865 the Sultan of the Fadhli tract, which has a seaboard of 100 m. extending from the boundary of the Abdalis, attempted to blockade Aden on the land side, but was utterly routed by Lieutenant-Colonel Woolcombe, C.B., at Bir Said, 15 m. from the Barrier Gate. A force under Brigadier-General Raines, C.B., then marched through the Abgar districts, which are the lowlands of this tribe, and destroyed several fortified villages. Subsequently, in January 1866, an expedition went from Aden by sea to Shugra, the chief port of the Fadhliis, 65 m. from Aden, and destroyed the forts there. Since 1867 this tribe, which numbers 6700

¹ Aden was the first addition to the Empire in the reign of Queen Victoria.

fighting men, have adhered to their engagements. The Abdalis inhabit a district 33 m. long and 8 m. broad to the N.N.W. of Aden, and number about 8000 souls. Their territory is called Lahej, and the capital is Al-Hauta, 21 m. from the Barrier Gate.

It is under contemplation to construct two short railways from Aden to Lahej and Nobat Dakim, and to Sheikh Othman and D'thala.

Aden is hot, but healthy. The promontory is about 5 m. long and 3 m. broad, and the highest point on it, the Rock, rises 1700 ft. above the sea. The lighthouse on Ras Marshag, the S.E. point, has a fixed light visible 20 m. off. The town has a population of 46,000, but its trade is slowly decaying. A visit to the bazar, if the stay of the steamer will allow of this, will show wild Arabs from the interior of Arabian Yaman, Turks, Egyptians, hideous Swahelis from the coast of East Africa, untamed, shock-headed Somalis, Jews of various sects, inhabitants of India, Parsis, British soldiers, Bombay Mahrattas, and Jack-Tars. The Crater used in former days to be the fortress of Aden. Now modern science has converted "Steamer Point" into a seemingly impregnable position, the peninsula which the "Point" forms to the whole Crater being cut off by a fortified line which runs from N. to S. just to the eastward of the coal wharfs. The port is visited yearly by more than 1650 steamers, with a tonnage of 3,000,000 tons: the value of the sea trade is very large, about £7,000,000; the income of the Port Trust is 4½ lakhs. and of the Municipality 2 lakhs.

Inside the Light Ship the water shallows to 4 fathoms, and a large steamer stirs up the mud with the keel and action of the screw. As soon as the vessel stops, scores of canoes, with one or two Somali boys in each, paddle off and surround the steamer, shouting, "Have a dive—have a dive," and "Good boy—good boy," all together, with a very strong accent on the first syllable, and dive for small coins flung to them. Owing to a number of fatalities from sharks, this is prohibited in the S.W. monsoon months.

Steamers seldom stop nowadays for more than a few hours at Aden. Notice is always posted on board as to the desirability or not of landing. Transshipment took place, before the War, each alternate week in the case of the P. & O. mail steamers to the local Aden-Bombay Express mail steamer.

It takes from twelve to twenty minutes to land at the Post Office Pier, which is broad and sheltered. To the left of it are the hotels and shops. At a short distance N. of the hotels is a condenser belonging to a private proprietor. There are three such condensers belonging to Government, and several the property of private Companies, and by these and an aqueduct from Sheikh Othman,

7 m. beyond the Barrier Gate, Aden is supplied with water. Condensed water costs about Rs.2 per 100 gallons.

The **tanks** under the Peak are worth a visit, but the distance to them is about 5 m. Their restoration was undertaken in 1856, and they are capable of holding 8,000,000 gallons of water. The ravines which intersect the plateau of the Crater converge into one valley, and a very moderate fall of rain suffices to send a considerable torrent down it. This water is partly retained in the tanks which were made to receive it, and which are so constructed that the overflow of the upper tank falls into a lower, and so on in succession. As the annual rainfall at Aden does not exceed 6 or 7 in. Malik al Mansur, King of Yaman, at the close of the 15th century built an aqueduct to bring the water of the Bir Hamid into Aden (see Playfair's *History of Yaman*).

The **Salt Pans** on the way to Sheikh Othman are curious. The sea-water is pumped into shallow pans cut out of the earth, and allowed to evaporate, and the salt which remains is collected. It belongs to an Italian company, who pay royalty on every ton of salt procured. The Keith-Falconer Medical Mission at Sheikh Othman, as well as Steamer Point, was established by the Hon. Ion Keith-Falconer, Arabic Professor, Cambridge, who died there on 11th May 1887. His tomb, of fine Carrara marble, is in the military cemetery of Aden. The Mission, under the care of the doctors of the Free Church of Scotland, is most popular. At Steamer Point there are three churches for the troops—Anglican, Scottish, and Roman. In the Crater there are two churches. On the 27th November 1911 H.M. the King Emperor George V., with the Queen Empress, landed at Aden, received an address of welcome, and replied to it, on his way to India to the Delhi Darbar of 12th December.

After leaving Aden the only land usually approached by steamers bound for India is the island of **Socotra**,¹ which is about 150 m. E. of Cape Guardafui, the E. point of the African continent. The island is 71 m. long and 22 m. broad. Most of the surface is a table-land about 800 ft. above sea-level. The capital is Tamarida, or Hadibu, on the N. coast. The population is only 4000, or 4 to the square mile. It is politically a British possession subordinate to Aden, but administered in its internal affairs by its own chiefs.

Four days after passing Socotra the mainland will be sighted behind Bombay, which lies 6° N. of Aden in lat. 18° 58' above the Equator and long. 72° 48' E. of Greenwich.

¹ Known to the Greeks and Romans as the island of Dioscorides. This name and that by which the island is now known are (according to the *Encycl. Brit.*) usually traced back to a Sanskrit form Dvīpa-Sakhadhara, "the island abode of bliss."

(3) GENERAL INFORMATION, STATISTICAL, ETHNOLOGICAL, HISTORICAL, ARCHÆOLOGICAL, AND MATERIAL

THE PEOPLE OF INDIA

The census of 1911 (the latest) gave the population of British India and Burma as follows :—

	Area in Square Miles.	Population.
British Territory	1,093,074	244,267,542
Native States and Agencies	709,583	70,888,854
India, Total	1,802,657	315,156,396

Of this total of 315,000,000 about 123,000 (in 1901 the number was 97,000) are British-born, of whom nearly two-thirds are soldiers. The army of British India comprised in 1915-16 :—

British Troops (including Officers)	74,776
Indian do.	163,055
	<u>237,831</u>

In addition, there were, before the War, Indian Reserves, 36,000 ; Imperial Service Troops, furnished by Native States, 18,000 ; and European and Anglo-Indian Volunteers, 36,000—making altogether 90,000 additional men trained by British officers. These numbers have varied under War conditions. The Native States had also semi-trained troops to the number of 90,000, which are not included in this list.

The original races in India consisted of (1) the Aborigines, or non-Aryans, and (2) the pure Aryans, or twice-born castes. The bulk of the population is now regarded as consisting of Hindus, the descendants of the Aryans, and non-Aryans ; the great majority of the Muhammadans are sprung from converts of the same stock.

The census of 1911 gave the following religious statistics :—

Hindus (including	Sikhs	3,014,466
Brahmas 5504,	Jains	1,248,182
Aryas 243,445)	Parsis	100,096
Animistic	Jews	20,980
Muhammadans	Minor Religions and	
Buddhists	Religions not returned	37,101
Christians		

THE MUHAMMADANS

MUHAMMAD ("the praised," from *hamd*, praise) was born at Mecca (Makka) on the 29th August 570 A.D. in the Koreish (Quraish) ruling tribe. His father, Abdulla, was a merchant, son of Abdul Muttalib, the patriarch of the House of Hashim; his mother's name was Amina. His father died before his birth, his mother when he was barely five years old. He remained three years in charge of his grandfather, and on the latter's death passed to the care of his uncle, Abu Talib. When twenty-five years old he became manager or agent to a rich widow, named Khadija, who, although fifteen years his senior, offered him marriage. By her he had sons, who all died in infancy, and four daughters, of whom three survived, the youngest, Fatima, being married to Ali, the son of Abu Talib; from her are descended the nobility of Islam, the Saiyads and Sharifs.

At the age of forty Muhammad claimed to have received the first divine communication in the solitude of the mountain Hira, near Mecca, where the call came to him, and the angel Gabriel commanded him to preach the new religion. The Meccans persecuted him and his followers for his preachings; his wife and uncle died; and he became poverty-stricken. Threatened with death, Muhammad, accompanied by Abu Bakr, left Mecca on the 16th July 622. Escaping from the Koreish, they reached the rival city, Yathreb, some 270 m. to the N., where he was accepted as a Prophet. The city was henceforth called the city of the Prophet—Medinat-un-Nabi, or, shortly, Medina. The Meccans pursued him and the Medinists with hostility, and he repelled their attacks. In the year 630 he, with 10,000 men, conquered Mecca. Returning to Medina, he died on the 8th of June 632, and was there buried.

The chief tenet of the Muhammadan religion is Islam, which is generally held to mean, resignation, submission to God; but some describe it as "striving after righteousness." A Muslim, or Mussalman, is one who professes Islam. In its dogmatical form it is Imam (faith), in its practical Din (religion). The fundamental principle is, "There is no God but God; and Muhammad is the Prophet of God (Lá illáha illá 'lláh Muhammadan Rasulu 'lláh). This is the *Kalima*, or creed, which is to be recited. There are also four principal duties: (1) Daily prayers (which should be said five times a day—at daybreak, noon, afternoon, sunset, nightfall); (2) the giving of alms (in certain proportions of property, to certain classes of persons); (3) the fast of Ramazan (from dawn to sunset for a month, from the appearance of the new moon); (4) a pilgrimage (Hajj, Hajji), once in a lifetime, to the ancient shrine of the Kaaba, at Mecca. In the Koran (which embodies the teachings and precepts of Muhammad, and is believed

to have been sent down by God to the seventh or lowest heaven and then revealed from time to time to Muhammad by the angel Gabriel) a holy war or *jihad* is enjoined as a religious duty; but the Muhammadan subjects of a government, under which the practices of the Muhammadan religion are freely permitted, are bound to obey the government. The Muhammadans believe in resurrection, heaven, and hell. The meaning of the description of a future existence as given in the Koran is much disputed. On the one hand large masses of Muslims accept the statements of the Koran as to the sensuous delights of Paradise in their literal sense; on the other hand, they are regarded as word-paintings used in a figurative sense. In hell all who deny the unity of God will be tortured eternally. The idea of the exclusion of women from Paradise is at variance with the whole tenor of the Koran, and is contradicted by various passages. Muhammad enjoined care in ablution of the hands, mouth, and nose before eating or praying. The Koran expressly forbids the use of wine, including all inebriating liquors and any intoxicants. It forbids also the eating of the flesh of swine; and no animal is lawful food unless it be slaughtered by cutting the throat. Usury and games of chance are prohibited, and the laws against idolatry are very stringent. A Muslim is allowed to marry one, two, three, or four wives, provided, it is said, he can deal with all of them with equity; if not, he is limited to one. He can also cohabit with female slaves obtained by purchase or made captives in war (called "those whom your right hand hath acquired") in addition to the lawful wives. An absolute divorce consists of the mere repetition of the words, "Thou art divorced" three times. Slavery is said to have been limited to those who were taken in lawful warfare, and under certain circumstances they were emancipated. Besides the women above-mentioned, a man must not look upon the face of any other woman except a near relative. There is no priesthood in Islam, every man is his own priest and pleads for himself for forgiveness and mercy. Essentially a democratic creed, it recognises no distinction of race or colour among its followers. Hope and fear, reward and punishment, with a belief in predestination, form the system of faith. It is contrary to Islam to make any figure or representation of anything living.

There are two main divisions of Muhammadans—sometimes called Sects, sometimes Churches. The chief point of difference between them is the question of the title to the spiritual and temporal headship of Islam. The Sunnis advocate the principle of election, and recognise Abu Bakr, Omar, and Othman as the first three Khalifas (Khalifa, Caliph = Vicegerent), and Ali as the fourth; the Shias adhere to apostolical descent by appointment and succession, and regard Ali as the first Khalifa. Out of the 66,647,299 Muhammadans

in India (by the census of 1911) five-sevenths are Sunnis; they and almost all the Muhammadans in other nations acknowledge the spiritual headship of the Sultan of Turkey. They are again divided into four principal "persuasions"—the Hanafi, Shafei, Maliki, and Hanbali—so called after their founders. Hanafism is generally prevalent in India and Arabia. The Shias are two-sevenths of the Indian Muhammadans. Shia-ism is the State religion of Persia. Of its several sub-sects, the Asna-aasharia is the principal, meaning that it recognises the spiritual headship of the twelve Apostles of the House of Muhammad. In the 16th century Sultan Salim, the great Osmanli conqueror, obtained the Caliphate from the last Caliph at Cairo; since then the Osmanli rulers of Turkey have assumed the title of Caliph, and have been recognised as their spiritual head, *Shaikh-ul-Islam*, by the bulk of the Sunnis in India and elsewhere.

Eras.—The Muhammadan era of the Hijra takes its name from the "departure" of Muhammad from Mecca, commencing with the date of Friday, the 16th of July 622 A.D., ordered by the Khalifa Omar to be used as their era by Muhammadans. Their year consists of twelve lunar months, as follows:—

Muharram	30 days	Rajab	30 days
Safar	29 "	Sh'aban	29 "
Rabi ul awal	30 "	Ramazan	30 "
Rabi us-sani	29 "	Shawwal	29 "
Jumada ul awal	30 "	Zilkada	30 "
Jumada us-sani	29 "	Zil Hijja	29 "
= 354 days.			

Their year, therefore, is 11 days short of the solar year, and their New Year's Day is every year 11 days earlier than in the preceding year. In every 30 years the month Zil Hijja is made to consist 11 times of 30 days instead of 29, which accounts for the 9 hours in the lunar year, which is thus 354 days, 9 hours. To bring the Hijra year into accordance with the Christian year, express the former in years and decimals of a year, multiply by .970225, add 621.54, and the total will correspond exactly to the Christian year. Or to effect the same correspondence roughly, deduct 3 per cent. from the Hijra year, add 621.54, and the result will be the period of the Christian year when the Muhammadan year begins. The Muhammadan year 1329 Hijra commenced on the 2nd January 1911, and the following two years Hijra on the 22nd December 1911 and 11th December 1912; 1332 Hijra commenced on 30th November 1913, and 1333 Hijra on 19th November 1914: the year 1336 A.H. commenced on 18th October 1917.

The Tarikh Ilahi or Era of Akbar, and the Fasli or Harvest Era.

These eras begin from the commencement of Akbar's reign on Friday, the 5th of Rabi us-sani, 963 A.H. = 19th of February 1556 A.D.

MUHAMMADAN FESTIVALS

Bakar (Cow) *Id-ul-uzha*, or *uz-zoha*, or *Id-i-kurban* (sacrifice), is held on the 10th of Zil Hijja in memory of Abraham's offering of Ishmael, which is the version of the Koran. Camels, cows, sheep, goats, kids, or lambs, are sacrificed.

Muharram (The Sacred¹), is a period of mourning (the Shias fast on some of the days) in remembrance of the death of Husain, the son of Ali by Fatima, the daughter of Muhammad. Hasan, eldest son of Ali, was poisoned at the instigation of the future Khalif Yezid in 49 A.H., and Husain was murdered at Karbala on the 10th of Muharram, 61 A.H.=9th October 680 A.D. The fast begins on the 1st of Muharram and lasts ten days. Muslims of the Shia persuasion assemble in the T'aziya Khana, or house of mourning. On the night of the 7th an image of Burak, the animal (vehicle) on which Muhammad is popularly supposed to have ascended to heaven, is carried in procession, and on the 10th Tabuts² or Taziyas (biers). These are thrown into the sea, or other water, and in the absence of water are buried in the earth. The mourners move in a circle, beating their breasts with cries of "Ya! Hasan! Ya Husain!" or "Ya Ali!" At this time fanatical spirit is apt to run high, and serious disturbances sometimes take place (see "Hobson-Jobson" in the *Glossary of Anglo-Indian Words and Phrases*, Yule and Burnell, p. xxxvii).

Akhiri-Chahar Shamba, held on the last Wednesday of Safar, when Muhammad recovered a little in his last illness and bathed for the last time. It is proper to write out seven blessings, wash off the ink and drink it, as also to bathe and repeat prayers.

Bara Wafât (the great death), held on the 13th of Rabi ul awal in memory of Muhammad's death, 11 A.H.

Shab-i-barât (night of allotment), held on the 16th of Sh'aban, when it is supposed that human deeds are measured and their meeds allotted: only observed in India; celebrated with fireworks. The Koran ought to be read all night, and the next day a fast should be observed.

*Ramazan*³, the month of fasting of the Muhammadans. The night of the 27th is called Lailat-ul-Kadr, "night of power," because the Koran came down from heaven on that night.

'Idu 'l-fitr, the festival when the fast of the Ramazan is broken. The evening is spent in rejoicings.

¹ The name is derived from the corresponding old Arabic month, in which it was unlawful to wage war.

² The shape of this is intended to simulate the tomb of Ali at Karbala.

³ The name is derived from ramaz, burning, this month being the middle summer month in the first Muhammadan year.

MUHAMMADAN RULE IN INDIA

The first connection of the Muhammadans with India in the 7th and 8th centuries was naturally by the old sea route from the continent of Asia, and from the seat of power of the Khalifat at Bagdad. When this power grew weak, first the Seljuk kingdom broke away from it on the E., and then the kingdoms of Ghazni and Ghor in the Afghan mountains split off in turn from that. Early in the 11th century the N. of India, as far as Benares, Gujarat, and Kathiawar, was subjected to repeated invasions by the famous Mahmud of Ghazni; and at the close of the 12th century the Prince of Ghor and his lieutenants effected the permanent conquest and occupation of that part of the country. For three hundred years the Slave dynasty and the other dynasties, chiefly Pathan, which succeeded it, ruled at Delhi and extended their authority to Bengal and Gujarat, and even to the Deccan; but the repeated invasions of the Mughals on the N., and probably the failure of robust recruits from the Afghan mountains, led to the gradual weakening of the central power, which was finally shaken to its very foundations by the invasion of Timur at the end of the 14th century (p. 275); and when, a century later, Babar and his Mughals conquered India, the Imperial authority had been reduced to very narrow limits. Meanwhile, one Muhammadan dynasty, an offshoot of the Imperial line, had been established at Gaur, in the Malda district in Bengal (p. 416), at an early date, and another, known as the Bahmani, rather later at Gulbarga, in the Deccan (p. 474), when the power of Delhi recoiled from there, and at the close of the 14th century Muhammadan Governors had also become independent in Gujarat (p. 172) and Malwa (pp. 124-5), and at Jaunpur (p. 377); and thus, though when Babar became Emperor the Delhi power was being threatened by the revived Hindu forces of Rajputana, N. India generally was under Muhammadan rule at that time. It was then, too, that the Muhammadan kingdoms of Ahmadnagar, Bijapur, and Golconda (pp. 473, 490, and 511) were founded on the fall of the Bahmani dynasty; and when these kingdoms crushed the only great Hindu power in S. India, that of Vijayanagar (p. 516), at the Battle of Talikota in 1565 A.D., about the time, be it remembered, when Spain attained its greatest power, it looked as if Muhammadan sway would be permanently extended to Cape Comorin.

These kingdoms, however, exhausted their energies in internal and internecine quarrels; and when, after subduing the other States of India, the Mughal Emperors turned to them, they fell one by one, but in their fall, and through the consequences of it, dragged down the

victor to ruin also. While it lasted, the Mughal dynasty was distinguished by extraordinary outward splendour, which extorted the title of "the Great Mughal," or Mogul, from European travellers; and no dynasty, perhaps, since the world began, ever produced six Princes so great, take them all in all, as Babar, Humayun, Akbar, Jahangir, Shah Jahan, and Aurangzeb, whose united reigns covered a period of nearly two hundred years, 1526-1707. But as its splendour was unparalleled, so were the suddenness and completeness of the fall of the dynasty; and within sixty years of the death of Aurangzeb the Mahrattas were temporarily masters of Delhi, which was simply rent to death by the invasions of the Persian Nadir Shah and the Afghan Ahmad Shah in 1739 and 1757. It is almost impossible to realise that these invasions, which can be paralleled only by those of Attila and Timur, took place at a time when Europe was entering on the modern phase in which we still live, and N. America was about to become a great separate power.

Between these two dates the kingdoms of Oudh and Hyderabad had become independent of the central Delhi Power; if the Great Governors of the Panjab did not become so also, this was due simply to their position between the invaders and the capital, and to the presence of the Sikhs in the province. Neither of the new Muhammadan kingdoms, however, possessed any real vital power; and both of them, and Bengal, would have inevitably fallen a prey to the Mahrattas, after their extraordinary recovery from the carnage of Panipat in 1761, but for the intervention of British power. As it was, when Delhi was taken from the Mahrattas in 1803 they practically dominated India from the Panjab to Hyderabad and Mysore, and from Gujarat to Orissa. The resumption of Oudh in 1856 on account of the reckless misgovernment of its rulers, and the conquests of the Mysore dynasty of Hyder Ali and Tipu Sultan in 1799, and of the Amirs of Sind in 1843, have left Hyderabad the sole remaining Muhammadan power of first-class importance in India, to which can be added as instances of Muhammadan States of recent origin—Khairpur, in Sind (p. 359); Junagadh, in Kathiawar (p. 205); Bahawalpur, in the Panjab (p. 357), and Rampur in Rohilkhand.

SOME MUHAMMADAN DATES AFFECTING INDIA

	A. D.
Birth of Muhammad	570
His departure from Mecca to Medina.	The Hijra (Hegira) era 16th July 622
Conquest of Mecca	630
His death	8th June 632
Arab invasions of Sind	637-828
Arabs under Muhammad Kasim conquered Sind	711

	A.D.
Mahmud of Ghazni defeated the Rajputs at Peshawar	1001
Mahmud captured Somnath in Gujarat, and carried off the temple gates to Ghazni	1024
The Afghans of Ghor captured Ghazni	1152
Muhammad bin Sam, known as Shahabuddin, Ghor, invaded the Panjab, and his lieutenant, Kutb-ud-din, took Delhi after the Battle of Thanesar, and Kanauj the next year	1193-94
Kutb-ud-din (originally a Turki slave) proclaimed himself sovereign of India at Delhi	1206
(1) The Slave-Kings of India, 1206-88. (2) The Khiljis, 1288-1321. (3) The House of Tughlak, 1321-1412. (4) The Saiyads, 1414-50. (5) The Lodis, 1450-1526.	
Altamsh extended the empire of the Slave dynasty	1211-36
Altamsh saved India from an invasion by Mughals under Chengiz Khan	1217
Ala-ud-din Khilji conquered Southern India; defeated several Mughal invasions from Central Asia.	1295-1317
Muhammad Tughlak (Juna Khan) sought to establish a southern capital at Deogiri (Daulatabad)	1330-40
Timur, or Tamerlane, sacked Delhi	1398
Babar, the Mughal, sixth in descent from Timur, defeated the Pathan (Lodi) Sultans of Delhi at the Battle of Panipat	1526
Babar (1482-1530) defeated the Rajputs at Fatehpur Sikri, near Agra	1527
The six great Mughal Emperors	1526-1707
Akbar defeated the Pathans at Panipat	5th Nov. 1556
Akbar conquered the Rajputs, annexed Bengal, Gujarat, Sind, Kashmir, and Kandahar	1567-94
Death of Akbar at Agra	1605
Reign of Jahangir	1605-27
Reign of Shah Jahan	1627-58
Reign of Aurangzeb	1658-1707
Death of Sivaji	1680
Commencement of the struggle between the Mughal Emperor and the Mahrattas	1688
Aurangzeb captured Sambaji, the son of the Mahratta chief Sivaji, and put him to death	1689
Death of Aurangzeb; decline of the Mughal power	1707
Defeat and persecution of the Sikhs. The Mughals put their leader, Banda, to death with cruel tortures	1716
Oudh practically independent of Delhi	1721
Hyderabad became independent under Chin Kilich Khan Nizam-ul-mulk	1724
Kabul severed from the Mughals by Nadir Shah, of Persia	1738
Nadir Shah, King of Persia, sacked Delhi	1739
The Mahrattas obtained Malwa	1743
Five invasions of the Afghan Ahmad Shah Durani, and cession of Panjab to him	1747-61
The Mahrattas obtained Southern Orissa and tribute from Bengal	1751
Ahmad Shah Durani sacked Delhi	1757
The Mahrattas captured Delhi	1759
Defeat of the Mahrattas by the Afghans at the Battle of Panipat	1761
General Lake captured Delhi	1803

LIST OF SOVEREIGNS AND MUGHAL EMPERORS WHO REIGNED
AT DELHI FROM 1193 TO 1857 A.D.

*The Ghori, Turki, and Pathan Kings of Hindustan who
reigned at Delhi.*

	A.H.	A.D.
Muhammad bin Sam, Ghori	589	1193
Kutb-un-din, 1st Dynasty of Slave (Turki) Kings	602	1206
Aram Shah	607	1210
Shams-ud-din Altamsh	607	1211
Rukn-ud-din Firoz	633	1236
Sultan Raziya	634	1236
Balban	664	1266
Kaikubad	686	1286
Jalal-ud-din Firoz Shah Khilji, 2nd Dynasty, Pathan	689	1288
Ala-ud-din Muhammad	695	1296
Shahab-ud-din 'Umar	715	1316
Kutb-ud-din Mubarak	716	1316
Nasir-ud-din Khusru	720	1321
Ghias-ud-din Tughlak, 3rd Dynasty, Pathan	720	1321
Muhammad bin Tughlak	725	1325
Firoz Shah Tughlak	752	1351
Muhammad Shah	792	1390
Khizr Khan Saiyad, 4th Dynasty, Saiyad	817	1414
Mubarak Shah II.	824	1421
Muhammad Shah	837	1433
'Alam Shah	847	1443
Bahlol Lodi, 5th Dynasty, Pathan	855	1450
Sikandar Lodi	894	1488
Ibrahim Lodi	923	1518
Babar	932	1526
Humayun ¹	937	1530
Akbar	963	1556
Jahangir	1014	1605
Shah Jahan	1037	1627
Aurangzeb	1068	1658
Bahadur Shah	1119	1707
Jahandar Shah	1124	1713
Farrukhsiyar	1124	1713
Muhammad Shah	1131	1719
'Ahmad Shah	1161	1748
Alamgir II.	1167	1754
Shah Alam	1173	1759
Akbar II.	1221	1806
Bahadur Shah	1253	1837-1857

THE HINDUS

IN speaking of the religion of the Hindus it is customary to use such words as Vedism, Brahmanism, and Hinduism, but these names are not recognised by the Hindu orthodoxy. They do not

¹ This reign included the Pathan Interregnum of Sher Shah (1540-45) Salim Shah, and other Sur Kings up to 1555.

connote what is commonly called religion. In this chapter the word is used in the sense of a system of worship, etc., which would lead to heaven or give man his desires through the medium of a deity. Thus various systems flourished and decayed.

The first form of the Hindu "religion" was Vedism, the worship of Nature, as represented in the songs and prayers collectively called Veda, and in which the chief gods were the triad Indra (rain), Agni (fire), and Surya (sun). Then followed Brahmanism, from *brih*, to expand, which introduced the idea of a universal spirit, or essence, which permeated everything, men, gods, and the visible world being merely its manifestations. Prose works, called Brahmanas, were added to the Vedas, to explain the sacrifices and the duties of the Brahmans, or priests. The oldest of these may have been written about 1000 to 1200 B.C. The code of Manu, which was formulated in the 3rd century of the Christian era,¹ laid down the rules of domestic conduct and ceremony. It divided Hindus into four *Varnas*, or classes²—first, the Brahmans; second, the warriors, called Kshatriyas; and third, the agriculturists and traders, called Vaisyas. (All these, being of Aryan descent, were honoured by the name "twice born"). Fourth, were the Sudras, or conquered non-Aryan tribes, who had become serfs. During the time of Manu the racial distinction between the Aryans and non-Aryans ceased to exist, and the Sudras included all persons who were not initiated to the twice-born status. Many ruling families also were called Sudras, as some of them are called to-day. The Sudras were not allowed to be present at the great national sacrifices or at the feasts. The priests asserted that they, the Brahmans, came from the mouth of Brahma; the Rajputs, or Kshatriyas, from his arms; the Vaisyas from his thighs; and the Sudras from his feet. Caste was originally a distinction between priest, soldier, artisan, and menial. Each trade in time came to have a separate caste; and the priests insisted on the *varna*-duties, because they held that social order was dependent thereon.

The modern Hindu worship and theology is a development of Brahmanism. There is one impersonal and spiritual Being³ which

¹ According to the latest writer, Dr Ketkar, who places the work between 226 and 320 A.D.

² Much interesting information regarding the early Hindu peoples of India will be found in Mr R. C. Dutt's *Ancient India*, Mr V. A. Smith's *Early History of India*, and vol. 2 of the *Imperial Gazetteer* (1908).

³ "Principio coelum ac terras, camposque liquentes,
Lucentemque globum Lunae, Titaniaque astra
Spiritus intus alit, totamque infusa per artus
Mens agitat molem et magno se corpore miscet."

Virgil, Aen., VI. 724.

PLATE 1.

Some Common Forms of Hindu Gods.

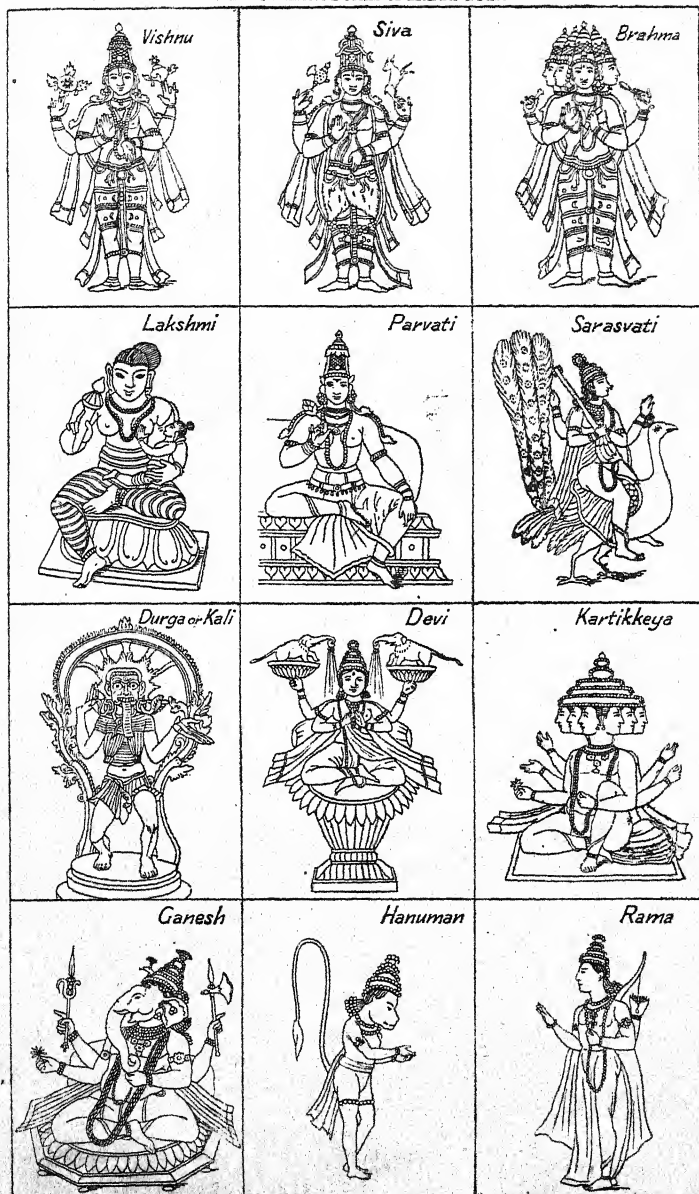
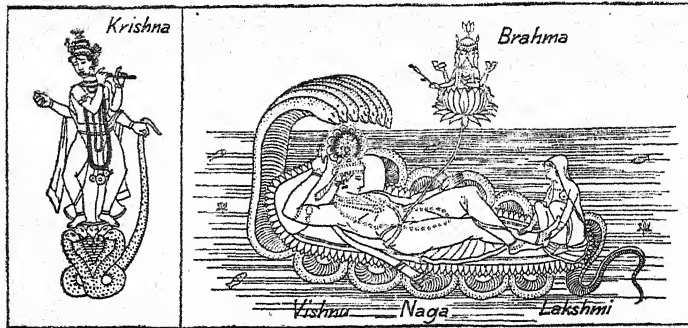
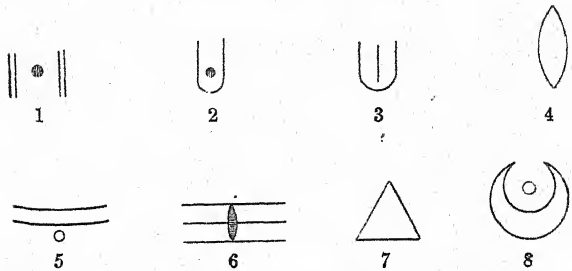


PLATE 2.

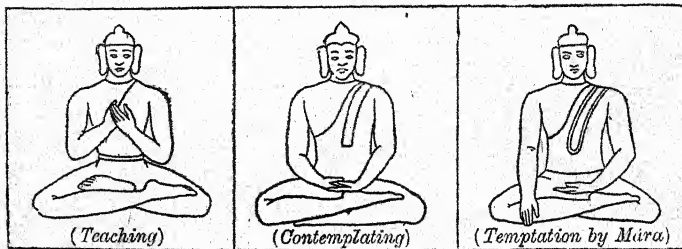


Caste Mark



1, 2, 3, and 4, Followers of Vishnu.
5, 6, 7, and 8, Followers of Siva.

Buddha



pervades everything—one God, called *Brahma*. His three personal manifestations are as *Brahma*, the Creator; *Vishnu*, the Preserver; and *Shiva*, the Destroyer and Reproducer. *Brahma*, the Creator, is generally represented with four heads and four arms, in which he holds a portion of the Veda, a spoon for lustral observations, a rosary, and a vessel of lustral water (see Plate 1). *Sarasvati*, the wife of *Brahma*, rides on a peacock, and has a musical instrument, the "vina," in her arms (see Plate 1). She is the goddess of music, speech, the arts, and literature. The sin of lying is readily expiated by an offering to her.

Vishnu holds a quoit in one hand, a conch shell in another, and sometimes a mace or club in another, and a lotus flower in a fourth (see Plate 1). A common picture shows him with his wife, *Lakshmi*, sitting on *Shesh*, the snake (eternity), with *Brahma* on a lotus springing from his navel (see Plate 2). He is said to have come down to the earth nine times, and is expected a tenth time. These nine incarnations (*avatara*) were in the form of—(1) a fish; (2) a tortoise; (3) a boar (*Varaha*); (4) a man lion (*Narsingh*); (5) a dwarf (*Vamana*); (6) *Parasu rama*; (7) *Rama*, the hero of the epic poem, the *Ramayana*; (8) *Krishna*; and (9) *Buddha*.

Rama carries a bow and arrows (see Plate 1). He is revered throughout India as the model of a son, a brother, and a husband. When friends meet it is common for them to salute each other by uttering *Rama's* name twice. No name is more commonly given to children, or more commonly invoked at funerals and in the hour of death. His ally, *Hanuman* (p. lxxii) is represented under a monkey form smeared with vermilion (see Plate 1). He is worshipped as the model of a faithful, devoted servant.

Krishna's biography is given in the epic of the *Mahabharata*. Although himself a powerful Chief, he was brought up among peasants, and is peculiarly the god of the lower classes. As a boy he killed the serpent *Kali* by trampling upon his head. He lifted the mountain-ridge of *Gobardhan* (p. 225) on his finger to shelter the herdsmen's wives from the wrath of *Indra*, the Vedic rain-god. He had countless wives and sons, and is painted blue, and stands on a snake, with his left hand holding its body and a lotus in his right (see Plate 2). Sometimes he is playing the flute.

The adoption of *Buddha* as one of the incarnations was a compromise with Buddhism. This led to the absorption of Buddhism into the general Hindu culture. On the last occasion *Vishnu* will descend as an armed warrior on a winged white horse, and will dissolve the universe at the close of the fourth or *Kali* age, of 432,000 years, when the world has become wholly depraved.

Devotion to *Vishnu* in his human incarnations of *Rama* and

Krishna (who were real men) is the most popular form of the Hindu religion in India. His descents upon earth were for the delivery of men from the threefold miseries of life—viz., (1) from lust, anger, avarice, and their evil consequences; (2) from beasts, snakes, and wicked men; (3) from demons. Vishnu has power to elevate his worshippers to eternal bliss in his own heaven.

Vishnu's wife, *Lakshmi*, the goddess of wealth and beauty, sprang from the froth of the ocean when churned by gods and demons (see Plate 1). An image of her is often to be found in the houses of shop-keepers. She is specially worshipped during the Diwali festival.

Siva is also called Mahadeva, the great god, and his wife, who is known by several names and in several characters, as Parvati, the goddess of beauty (see Plate 1); Durga, or Kali, the terrible (see Plate 1), etc., is also called Devi, the goddess (see Plate 1). The commonest of these is *Kali*,¹ who requires to be propitiated by sacrifices. Siva holds in his four hands a trident, an antelope, a noose for binding his enemies, and a kind of drum, and wears a tiger's skin about the loins. He is a less human and more mystical god than Vishnu, and is worshipped in the form of a symbol, the *lingam*, or a bull (*Nandi*, the Joyous). As destroyer Siva haunts cemeteries and burning-grounds, but his terrible qualities are now more especially associated with his wife, Kali. He is the impersonation of the reproductive power of nature,² the word Siva meaning "blessed" or "auspicious." He is also the typical ascetic and self-mortifier; and as a learned philosopher he is the chief god of the priests.

Siva has two sons—Ganesh, or Ganpati, and Kartikkeya. *Ganesh* has a fat body and an elephant's head (see Plate 1). He is a great favourite, being worshipped for good luck or success, and he is invoked at the beginning of every Indian book as a bringer of success, and also because he is the god of learning. His wife, Sarasvati, is the goddess of learning and speech. *Kartikkeya* has six heads and twelve arms, and is the god of war, the leader of the hosts of good demons (see Plate 1). In the south of India he is called Skanda or Subrahmanya.

The Hindu theory of metempsychosis (*Karma*) or transmigration of souls, arises from the belief that evil proceeds from antecedent evil, and that the penalty must be suffered in succeeding existences. According to Hindu belief there are eighty-four lakhs of different species of animals through which the soul of a man is liable to pass,

¹ In S. India Durga in this form is generally known as Bhawani (vulg. Bowani).

² Probably two-thirds of the Hindus worship Siva under this aspect embodied in the lingam.

and the Hindu's object is to get rid of the series of perpetual transmigrations, so that he may live in the same heaven with the personal god. To this end he makes offerings to the image of a god, Krishna, Ganesh, or Kali being the most generally selected ; he abstains from killing any animal ; he gives money to the priests ; and does penances which sometimes extend to severe bodily torture. In practice he fears the priests and demons and the loss of caste. Demons have to be propitiated, the caste rules strictly kept, and the priests presented with gifts. Great care has to be taken not to eat food cooked by a man of inferior caste ; food cooked in water must not be eaten together by people of different castes, and the castes are entirely separated with regard to marriage and trades. The Hindu has a special theory of his own regarding purity and pollution : these words do not simply mean physical purity. A sacred thread of cotton is worn by the higher castes. This thread makes a person a "twice born" Arya, and distinguishes him from a Sudra. Washing in any holy river, particularly the Ganges, and more especially at Allahabad, Benares, Hardwar, and other exceptionally sacred spots, is of great efficacy in cleansing the soul of impurities. Most of these observances and the worshipping of idols are rejected by the Arya Samaj,¹ a reformed body founded by Swami Dyanand (1827-53), which is attracting many of the educated Hindus in N. India. The Arya Samaj accepts the inspiration of the Vedas only ; the chief Brahma Samajists, mainly confined to Bengal (p. lxxvi), reject them as inspired scriptures.

Travellers should remember that all who are not Hindus are outcasts, contact with whom may cause the loss of caste to a Hindu. They should not touch any cooking or water-holding utensil belonging to a Hindu, nor disturb Hindus when at their meals ; and they should not seek to approach any holy place if objection is made. The most sacred of all animals is the cow ; crocodiles and other animals at holy places, and trees, plants, stones, rivers, and tanks, are also sacred. The eagle (Garuda) is the attendant of Vishnu, the bull of Siva, the goose of Brahma, the elephant of Indra, the tiger of Durga, the buffalo of Yama, the rat of Ganesh, the ram of Agni, the peacock of Kartikkeya, and the parrot of Kama (the god of love).

As many references to the *Mahabharata* and *Ramayana* occur in the *Handbook*, a brief account of these two famous epics is given here.

The *Mahabharata* of Vyasa in its present form was compiled about 500 B.C. to 500 A.D., but, recording events which may be referred to about 1500 B.C., celebrated the battle between the Pandava (Pandu) and Kaurava (Kuru) Princes. The former, five in number, named

¹ The number of Arya Samajists at the last census was 243,445, of Brahma Samajists only 5504.

Yudhishtir, Bhishma, and Arjan, sons of one mother, and Nakula and Sahadeva, sons of another, were the offspring of Pandu, ruler of Hastinapur, an ancient city on the Ganges, 60 m. N.W. of Delhi, who ceded the kingdom to his elder, but blind brother, Dhritarashtra. The Kauravas were the sons of Dhritarashtra, and compelled him to send their cousins into exile, during which the marriage of Draupadi, daughter of Drupada, King of the Panchalas, took place, and most of the adventures which led to their names being attached to so many places all over India. At the end of their exile the Pandavas received the Southern portion of the Hastinapur kingdom, and settled at Indraprastha, now Indrapat (p. 283). Having lost this share of their inheritance through gambling with their cousins, the Pandavas again went into exile for twelve years, after which they returned with an army and claimed five "pats," or small towns, of their former kingdom (Indrapat, Tilpat, Sonepat, Bhagpat, and Panipat). Over this claim the great battle ensued, in which, after eighteen days, nearly all the Kauravas were finally killed, largely through treacherous acts on the part of the Pandavas. The account of the funeral ceremonies of the slain is famous and almost Homeric. The five brothers then resumed their residence at Indrapat, and Yudhishtir celebrated the Aswamedha, or horse sacrifice of imperial rule, on the bank of the Jumna. Finally the brethren and their wives retired to the Himalayas, and sought to reach Mount Meru; but only the elder brother won through to there, and he declined to enter when admittance was refused to his sole remaining companion, a faithful dog; he was admitted with his dog.

The *Ramayana*, ascribed to Valmiki, and also probably composed about the 5th century B.C., related the adventures of Rama, elder son of a King of Oudh, who was postponed in the succession to the son of a younger wife, and banished by his father. Rama accordingly proceeded into exile with his wife Sita to the abode of the hermit Valmiki; and, though the younger brother proved loyal to him on his father's death, he refused to return to Oudh until the term of his banishment had expired. Before this Sita was carried off from their forest abode by Ravana, king of Lankā,¹ inspired by his sister, whose love Rama had rejected. She was rescued from Lankā by Rama with the help of Hanuman, the monkey general, and proved her chastity by the ordeal of fire; but (according to a later tradition) was banished by her husband, and remained sixteen years in exile with Valmiki, after which she was finally reconciled to Rama. Rama is commonly known in India as Ram Chandra; his brother Lakshman constantly appears in the local legends which relate to him.

¹ There has been a dispute among Indian scholars as to whether *Lankā* is the same as Ceylon or Java. The orthodox view is that it is Ceylon.

The Kalī-Yug, or Hindu Era

According to the Hindus, the world is now in its fourth Yug, or Age, the Kali-Yug, which commenced from the Equinox in 18th Feb. 3102 B.C., and will last 432,000 years. The three preceding ages were the Satya, the Treta, and the Dwapara. The Satya, or Age of Truth, lasted 1,728,000 years; the Treta (from *tra*, "to preserve") lasted 1,296,000; and Dwapara (from *dwa*, "two," and *par*, "after") 864,000 years.

The Era of Vikramaditya, Samvat or Samvat

This era commenced from the first year of the legendary King Vikramaditya, fabled to have reigned at Ujjain 57 B.C. It is in ordinary use in N. India. The Bikramajit year, as it is usually called, 1967-8, began on 23rd October 1911.

The Saka Era, or Era of Salivahana

Salivahana [having a *sāli* (lion) for his vehicle, *vahana*], was a King who reigned in the S. of India. The Saka era dates from his birth, 78 A.D. This is the era in general use in S. India. The year 1834 of this era commenced on 9th March 1911.

The Hindu year has six seasons or *ritus*: *vasanta*, "spring"; *grishma*, "the hot season"; *varsha*, "the rains"; *sharada*, "the autumn" (from *shri*, "to wither"); *hemanta*, "the winter"; *shishira*, "the cool season."

Table of the Seasons and Months in Sanskrit, Hindi, and English.

	NAMES OF MONTHS.		
	SANSKRIT.	HINDI.	ENGLISH.
1. VASANTA . . .	{ Chaitra (Aries). Vaishakha.	Chait. ¹ Baisakh.	April. May.
2. GRISHMA . . .	{ Iyeshtha (Gemini). A'shadha.	Jeth. Asarh.	June. July.
3. VARSHA . . .	{ Sravana (Leo). Bhadra (Virgo).	Sawan. Bhadon	August. September.
4. SHARADA . . .	{ Ashwina. Kartika.	Asoj. Kartik.	October. November.
5. HEMANTA . . .	{ Margasirsha. Pausha.	Aghan. Pús.	December. January.
6. SHISHIRA . . .	{ Magha. Phalguna (Pisces).	Magh. Phagun.	February. March.

¹ The Indian months begin about the 15th of the English month; thus Pús is the latter half of January and the first half of February, and so with all the other months.

HINDU FESTIVALS

Makar Sankranti.—On the 1st of the month Magh (about 12th January) the sun enters the sign Capricorn or Makar. From this day till the arrival of the sun at the N. point of the zodiac the period is called Uttarayana, and from that time till he returns to Makar is Dakshinayana, the former period being lucky and the latter unlucky. At this festival the Hindus bathe, and rub themselves with sesamum oil. They also invite Brahmans, and give them pots full of sesamum seed. They wear new clothes with ornaments, and distribute sesamum seed mixed with sugar.

Vasant Panchami is on the 5th day of the light half of Magh, and is a festival in honour of vasanta or spring.

Sivarat, the night of Siva, is held about the middle or end of February, when Siva is worshipped with flowers during the whole night.

Holi.—A festival in honour of Krishna, held fifteen days before the moon is at its full, in the month Phagun, celebrated with the squirting or throwing of red or yellow powder over every one. It is a kind of carnival, and all sorts of licence are indulged in.

Ashadhi Ekadasi, the 11th of the month Asarh, sacred to Vishnu, when that deity reposes for four months.

Nag Panchami, held on the 5th of Sawan, when the serpent Kali is said to have been killed by Krishna. Ceremonies are performed to avert the bite of snakes.

Janam Ashtami, held on the 8th of the dark half of Sawan, when Krishna is said to have been born at Gokul (p. 225). Rice may not be eaten on this day, but only fruits and other grains. At night Hindus bathe and worship an image of Krishna, adorning it with *tulsi* or *basil*.

Ganesh Chaturthi, held on the 4th of Bhadon, in honour of Ganesh, a clay image of the god being worshipped and Brahmans entertained. The Hindus are prohibited from looking at the moon on this day, and, if by accident they should see it, they get themselves abused by their neighbours to remove the curse.

Dasahara (*Dasaha*, or ten days, commonly Dussera), held on the 10th of Asoj, in honour of Durga, or Devi, the wife of Siva, who on this day slew the buffalo-headed demon Maheshasur. On this day Rama marched against Ravana, and for this reason the Mahrattas chose it for their expeditions. Branches of the *Butea frondosa* are offered at the temples. This is an auspicious day for sending children to school. The nine preceding days are called Navaratra, when Brahmans are paid to recite hymns to Durga. The Durga Puja holiday is the principal holiday of the year in Bengal.

Diwali, "feast of lamps," from *diwa*, "a lamp," and *avali*, "a

row," held on the new moon of Kartik, in honour of Kali or Bhawāni, and more particularly of Lakshmi, the goddess of prosperity, when merchants and bankers count their wealth and worship it. It is said that Vishnu killed a giant on that day, and the women went to meet him with lighted lamps. In memory of this lighted lamps are displayed from all houses, and are set afloat in rivers and in the sea, and auguries are drawn from them according as they remain lit or are extinguished.

Kartik Ekadasi, held on the 11th of Kartik, in honour of Vishnu, who is said then to rise from a slumber of four months.

HINDU RULE IN INDIA

The settlement in N. India of the Aryans, whose social system slowly developed into what is now known as Hinduism, took place gradually between 2000 to 800 B.C. The main colonies up to the time of the Muhammadan invasions were located along the valleys of the Panjab and of the Jumna and Ganges; and though some were pushed farther S. into the peninsula, the people and the rulers of that part of the country remained mainly aboriginal, and were gradually absorbed inside the Hindu pale. Of both the stocks which combine to make the mass of the Indian people there were many Ruling Houses, most of which from the time of Buddha and Alexander are known to us from one source or another, but hardly one of them has left any substantial memorials, if the Buddhist relics of antiquity and a few old Hindu temples be excepted. Indeed it is one of the curious facts of the East that, while the people are so immutable, the dynasties are extraordinarily ephemeral. The mention of only a few of the principal dynasties which ruled in the fifteen hundred years previous to the Muhammadan invasions would include the Nandas and Guptas of the Ganges Valley, the Scythian Kanishka and his successors at Peshawar (p. 337), Vikramaditya and Salivahana in Malwa (pp. 125, 127), the Anhilvara and Valabhi kings of Patan and Kathiawar (pp. 181 and 204), the Chalukyas (p. 31), who held sway from Gujarat to Mysore, the various rulers of Orissa (p. 444), the Telinga kings, who governed on the Godavari (p. 515), and the great Andhra, Chola, and Chera kingdoms of the S., situated on the Kistna, at Tanjore, and in the extreme point of the peninsula. Not only all these, but all the Hindu Kingdoms which were in existence in 1000 B.C., have passed away; and now, in the 20th century, the oldest Hindu Ruling Houses of India, those of Rajputana, can trace the origin of their present States only from the time of the Muhammadan conquest, while the beautiful capitals of these States are nearly all of a much later period, Jodhpur and Udaipur dating from the middle of the 15th and 16th centuries, and Jaipur

from the 18th. Owing partly to the protection afforded by the desert country which surrounded them, and partly to their strong feudal organisation, the Rajput States maintained a really independent position during the first three centuries of Muhammadan rule, and were able to secure one of subordinate independence under the Mughal Emperors, while the other Hindu Kingdoms of India were being gradually conquered, and the minor Muhammadan States absorbed; and, just when this process must have seemed to the ruling race to be complete, the harsh and ruthless treatment of the Rajputs and Mahrattas by the Emperor Aurangzeb evoked an outbreak of Hindu feeling which proved the principal cause of the downfall of the Mughal Empire. The older-fashioned chivalrous temperament of the Rajputs was, however, no match for the vigour and hardihood of the younger nation; and when British interference practically checked an Imperial Mahratta domination in India, it also saved the Rajput States from destruction. Of the other great Hindu Ruling Houses of India now existing, Mysore was restored by the British Power at the end of the 18th century (p. 528), while the State of Jammu and Kashmir was created only sixty years ago. The Sikh Ruling States (p. 296), which date from the middle of the 18th century, owe their present existence to British protection against Maharaja Ranjit Singh, and the great Mahratta States (p. xc) are of but slightly longer pedigree than these. The older States of Travancore and Cochin, protected for so long by their remote position, would inevitably have fallen to the Mysore Muhammadan dynasty had that survived, or to the Mahrattas, but for the advent of the British Power. As would be expected, the old-world Hindu customs, apart from mere religious observances, have survived to a greater extent in Rajputana than in any other part of India; and the traveller who, by means of a special introduction to the Resident or Political Agent, has the opportunity of properly observing them for a short time at one of the more remote Rajput capitals, will find his interest amply rewarded.

THE BRAHMA SAMAJ

THE *Brahma Samaj* represents the Theistic movement in India. It originated in Calcutta, and was formally inaugurated by Raja Ram Mohan Roy in 1830. One effect of early English education in India was to unsettle the minds of young men and shake their belief in orthodox Hinduism, and many of them drifted into atheism or agnosticism. The Raja, who was a man of commanding intellect and great piety, and was not only learned in the Hindu scriptures, but had also studied the Bible in the original Hebrew and the Koran

in Arabic, established the Brahma Samaj on an eclectic basis, accepting what was best in all great religions, but drawing his inspiration mainly from the *Upanishads*. He left for Europe in 1831, and died there in 1833. The movement languished for a time, until in 1843 it was joined by Debendra Nath Tagore. He was intensely spiritual, and under his long leadership the Brahma Samaj prospered, and branches were formed in various provincial centres. Keshab Chandra Sen became an adherent in 1857, and gave a fresh impetus to its activities. He was greatly influenced by the Bible, and introduced a definite programme of social reform. In 1862 he was ordained a minister of the Calcutta Brahma Samaj. He was full of missionary zeal, and preached in different parts of India. His advanced views on social questions were not shared by Debendra Nath Tagore; and in 1866 he seceded and founded the Brahma Samaj of India. Under his inspiring leadership the movement extended to Bombay, Madras, and the Panjab. In 1870 he visited England, and met with a cordial welcome from churches of all denominations. In 1872 he was instrumental in getting the "Native Marriage Act" passed to legalise inter-caste marriages. There was a further schism in 1878, when a large body of prominent Brahmas separated from Keshab Chandra Sen (who died in 1884), and the Sadharan Brahma Samaj was duly organised. It is now the most influential and popular branch of the movement. According to the census of 1911 there are 5504 Brahmas in India. The number is small, but it includes many men and women of culture and position. The influence of the Brahma Samaj is widely felt, and it is doing much to liberalise orthodox Hinduism and encourage social reform.

BUDDHISM AND THE BUDDHISTS

BUDDHISM is too vast a subject to be treated exhaustively in a few pages, but some notice of so widespread a religion is required. The history of the founder of Buddhism, the doctrines, the development and decadence of the religion, and its present circumstances, may be briefly stated.

Siddhartha Gautama, afterwards called Buddha (the Enlightened), or Sakyamuni, the sage of the Sakyas, belonged to the Kshatriya or warrior caste, and was the son of Suddhodana, ruler of the Sakya clan, settled around Kapilavastu, in the Nepalese Tarai, N. of the Basti district of the United Provinces. The year 558 B.C. has been suggested for his birth at the Lumbini garden, the modern Rummindei, near Kapilavastu, and 483 B.C. as the year of his death.

The story of his life is contained in the sacred literature of the Buddhists, undoubtedly based on truth, though enveloped in a mass

of legend. The sacred literature means the Pali Canon called the "Three Pitakas, or Baskets," of the Law and Tradition, besides subsequent commentaries; fragments of canonical writings in other dialects exist. It contains the supposed genuine sayings of the Buddha and the moral and religious principles of Buddhism. Among the works in the Canon are the Suttas (or Suttas), the dialogues, the Dhammapada, the Jatakas, the Buddhist psychology, etc. Pali, (the "Text") was a literary version of an Aryan dialect, later than the Vedas, earlier than classical Sanskrit. It had ceased to be a vernacular, but was the religious literature of Ceylon, Siam, and Burma, written on palm-leaf manuscripts. At the age of twenty-nine Gautama made "the great renunciation" of the world and its pleasures. Much troubled by the spectacle of human suffering—age, disease, and death—and impressed by the sight of a peaceful saint, he decided to leave his happy home, his loved wife, and his lately born child, and surrender himself to the search of mental peace. Cutting off his long hair and changing his princely raiment, Gautama left the palace suddenly and secretly in ragged garments. As a disciple of two celebrated Brahman sages, he strove for six years to content himself with their teaching and severe self-mortification; the strict austerities he practised produced no peace of mind or divine enlightenment—only great bodily weakness and a conviction of their inutility. So he abandoned penances, and sat in meditation under the Bo-tree, the "tree of knowledge," at Buddh Gaya, where he was tempted by Mara, the personification of carnal desire, to return to the world; but he resisted, and became the Buddha—the Enlightened.

Repairing to Benares, he preached his first sermon on "The Foundation of the Kingdom of Righteousness," commemorated by the Dhamek Stupa at Sarnath, and henceforth devoted his whole life to teaching. In the kingdom of Magadha (now Bihar), where he travelled, he was received with great reverence and hospitality by all classes. Sometimes the King, or another wealthy donor, would build a residence for the Teacher. His disciples formed, under rules framed by the Master, the community of mendicants (Bhikshus) from which the great monastic organisation, called the *Sangha*, was developed. Places such as Lumbini and Buddh Gaya and his temporary residences became sacred spots. At nearly eighty he died at Kusinagara, modern Kasia, in Gorakhpur District. The ceremony of burning his body was conducted with pomp, as for a King, and his ashes were divided, as precious relics, among the chief people to whom he had preached. Part of these have recently been discovered at Peshawar (p. 337) and at Piprawa (p. 421); the ashes at the latter place have been judged from the inscription on the

vase to be the relics of the Sakya Ruling Family. At his death Buddhism was the reformed religion of a sect, prevalent within the limited area of his preaching ; it was maintained by the organisation of the *Sangha* until the day of its expansion dawned.

Only a summary of the philosophical doctrines of Buddhism can be attempted here. But some knowledge of its character as a religion is essential for an understanding of a great period of ancient India.

In the Buddhist religion the personality of the Buddha is pre-dominant. No Supreme God is admitted in the system. The Buddha, as the teacher of the truth, and therefore the guide and saviour, is the central object of faith and devotion. By his doctrine the work of salvation is limited to human agency—that is, the human mind can achieve omniscience, and human nature arrive at absolute perfection ; its purpose was to lead men to a higher life. Human and animal happiness were its avowed object as a practical religion. It had a kindly spirit, and a central tenet is to keep to the “middle path” between worldliness and asceticism. Buddha, it is believed, taught that all life is suffering ; that suffering arises from indulgence in desires, especially the longing for continuity of life ; and that the only hope of relief lies in the suppression of sensual passions and every attachment, in Nirvana, the highest bliss—meaning, not the extinction or negation of being, but the extinction, the absence, of passionate desire, the goal by which union with the perfect good is obtained. Ignorance, delusion, and anger, are also fundamental evils and hindrances that must be completely destroyed by intense and continuous mental discipline. Each man must depend on himself and his own efforts towards intellectual and spiritual clearness. Each man must purify his life, grasp the law of causes, perceive the sorrow of existence, the impermanence of all states, and cease to believe in any “soul” apart from the elements which make up the individual and are dissolved at his death. Rewards and punishments, strictly speaking, do not come into the creed, but the inexorable working of cause and effect proceeds without a break, and thus good and evil done in one life bear fruit in the next. The connection between the lives is not the transmigration of a soul but the *Karma* (action), the force that passes on and causes the newly assembled elements of existence to form a new being living on earth or in one of the heavens or hells according to the acts and intentions of a former life, for those constitute the individual's *Karma*. A man's object should be to hear somewhere, at some time, the teaching of a Buddha and become enlightened by meditation and introspection, so as to earn a cessation of the cycle of lives through which he would otherwise be destined to pass, and thus finally to reach Nirvana, the sinless, calm state of mind

in which there is no renewed individual existence. Thus the final death, with no new life to follow—as there is no soul which continues to exist after death—is a result of Nirvana, but it is not Nirvana. All men are capable of attaining Nirvana, without distinction of caste, and neither sacrifices nor bodily mortifications are of any avail. To attain salvation by obtaining freedom from delusions, the Buddhist must follow the eightfold path and pass through four stages of higher and higher saintliness. This, the Noble Path, is the very pith of Buddhism, by which alone the Buddhist can reach *Arhatship*, the state of salvation, the state of a man made perfect. The Buddha himself is believed to have passed through a great number of existences in the course of the preparation for his final mission. The legends of these lives of Gautama are the famous *Jataka* tales which have formed the subjects of many ancient sculptures, paintings, and literary works of Buddhist countries.

The principal virtues inculcated by Buddhism are charity, compassion, truthfulness, chastity, respect for the *Sangha*, and self-restraint in regard to all the ambitions, pleasures, and attachments of life. The stricter code—the ten precepts—is binding on the religious order: only the first five precepts are binding on the laity. They are practical rules forbidding (1) the destruction of life in any form, (2) theft, (3) unchastity, (4) lying, (5) indulgence in intoxicating drinks, (6) eating at forbidden hours, (7) frequenting performances, (8) use of unguents and ornaments, (9) use of a large or ornamented couch, (10) accepting money.

Extreme asceticism and every kind of self-torture are contrary to the teaching of Buddhism as practised by the religious orders.

The Buddhist doctrine has been called a pessimist and atheist creed, with some excellent moral rules attached. But in reality it is not pessimistic, as it teaches the assurance of being able to put an end to sorrow, and infinite opportunities for beginning again after failure. Buddhism is “the embodiment of the eternal verity that as a man sows he will reap, associated with the personal duties of mastery over self and kindness to all men; and quickened into a popular religion by the example of a noble and beautiful life” (Sir W. W. Hunter).

The Buddhist ideal is lofty, and has done much for Oriental civilisation wherever it has prevailed. In practice the religion has been adapted to the needs of believers of many races, and prominence was given from early times to almsgiving and acts of piety, such as the building of shrines and monasteries. Faith in, adoration of, and meditation on, the Buddha are of great efficacy. Even in the earliest teaching the presence of a Perfect Buddha in the world is held to be indispensable for the teaching of the truth. Gautama is said to have been preceded by other Buddhas in past ages, and a future

Buddha Maitreya, is looked for. The more austere and rationalistic ideas of *arhatship* (saintliness) and *Nirvana* (cessation of sorrow by destruction of craving), as taught in the earlier phases of Indian Buddhism, developed afterwards into the vast and glowing conceptions of Mahayana Buddhists, multiplying Buddhas and Bodhisattvas (predestined Buddhas), and carrying the notion of *Nirvana* far beyond *arhatship*—the point where the Hinayana Buddhism stops. These ideas are expressed in Sanskrit literature and indicated to some extent in Buddhist art. The greatest Indian representatives of the Mahayana flourished in the first few centuries of the Christian era. In a yet later and debased Buddhism hardly any of the old virtue or rationalism can be traced. But the early art and principal Buddhist literature of India are inspired by a beautiful devotion and a reasonable morality. A summary of the spirit of Buddhism can be seen clearly set out in translations of the Dhammapada (the way, the state, the path, the footsteps of religion).

The day of expansion of Buddhism dawned when Asoka (272 to 231 B.C.), the third Mauryan King of Magadha, came under its influence, visited the Buddhist holy places, propagated and enforced the Buddhist Law of Piety, issued his rock-cut edicts, ordered that the sacred books should be collected, and was ordained as a monk. He ruled over the whole of India up to the Hindu Kush mountains and north of a line drawn W. from Nellore. Literature, civilisation, and culture combined to develop the religion; monks and nuns and laity alike could join the *Sangha*. Specimens of his rock edicts, inscribed under his title of Priyadasi, exist still at Girnar (p. 209), at Dhauli, near Bhubaneswar (p. 450), and at Shahbazgarhi, close to Hoti Mardan (p. 336); monolithic columns, lats, erected by him, with a portion of the edicts, may be seen at Allahabad (p. 43) and at Delhi (pp. 270-1). These edicts, deciphered by the genius of James Prinsep, embody for the most part the moral rules of Buddhism; they forbid the shedding of blood, inculcate obedience to parents, almsgiving, charity, mercy to all living creatures, respect for teachers, support of religious instructors; they refer to the appointment of censors of morals and missionaries and the creation of hospitals, roads, and wells, and conclude with prayers for the spread of Buddhism. The full number of principal edicts is fourteen, but there are also minor edicts on rocks and pillars. The edicts are of great interest as mentioning the Chola, Pandya, and Kerala Kingdoms of the South, and the Yavan (Greek) kings, Turmayaparni (Ptolemy), Antiiochena (Antiochus), Maka (Magus), and Alikasandare. Those specially interested in the subject will find the edicts in vol. 1 of the *Corpus Inscriptionum Indicarum*. The Buddhist legend is that Asoka covered India with 84,000 stupas and viharas. His administra-

tion was organised to enforce justice, religion, and virtue ; and he despatched several Buddhist missions to spread the doctrine far and wide. He was patron of the solemn assemblies, or Council, at Pataliputra, in 250 B.C., when the Pali Canon was finally revised and authorised ; his son (or brother) Mahendra headed the Buddhist mission to Ceylon.

After Asoka's time Buddhism more and more affected the literature and art of India. Towards the beginning of the Christian era exterior influences began to operate upon the religion, then widespread and popular in India, from the N.W. and E. Buddhist art made wonderful strides by the introduction of the Hellenic element. The Indo-Scythian monarch Kanishka (whose date is variously given from 58 B.C. to 278 A.D., and probably was 123 to 150 A.D.), a convert to Buddhism, became also a famous royal patron of the religion, raised mighty stupas, and encouraged the collecting of the Scriptures into a Canon. About this time, in the latter half of the 2nd century A.D., a marked development of the doctrine took place in N. India. The literature (Sanskrit works, shortly after translated into Chinese), sculpture, and painting show the predominance of a later conception of the Buddha and the essentials of Buddhist doctrine. This later phase of doctrine is called the Mahayana (the greater vehicle), the more advanced sect which outgrew, and was distinct from, the mother Church ; the Hinayana (lesser vehicle) more primitive doctrine of the South Asian countries, which have preserved the old Pali Canon, and, in general, corresponding motives in art. Under this newer Buddhism, the Mahayana, which had much in common with the older Hinduism, "the sage Gautama became in practice, if not in theory, a god, with his ears open to the prayers of the faithful, and served by a hierarchy of Bodhisattwas and other beings acting as mediators between him and sinful men." The Mahayana sect introduced many Bodhisattwas into their pantheon, with attendant deities and demons, spacious temples and images, processions, ceremonial, and festivals. The remains of Buddhist art are mainly the work of the Mahayana sect.

The missions to China led to visits of Chinese Buddhists, who made long and perilous pilgrimages to worship at sacred spots and collect copies of the sacred texts. Their accounts of their travels, fortunately preserved, are of the greatest value for our knowledge of the state of Buddhism in the 4th to 7th centuries A.D. Buddhism was the predominant religion from the 3rd century B.C. to the 4th century A.D., very influential, propagated systematically by a hierarchy, and wealthy, with its numerous monastic foundations, centres of learning and art. It flourished during those centuries, and the religious orders were strong. But it had already powerful

rivals in Jainism, and the Brahmanism (which was never ousted from India) adapted to popular worship and belief; the latter is to be distinguished from the Brahmanism of the Buddha's time, the strength of which seems to have been in sacrificial observances and Vedic study. Gradually the Brahmanic element in India overwhelmed the Buddhist as a popular religion, after the latter's prevalence for approximately one thousand years, so that Buddhism became by degrees assimilated to Hinduism; and by the 8th century Buddhism was no longer a philosophic doctrine. Some famous Buddhist monuments were converted in course of time into Hindu shrines. When Buddhism disappeared from the open country of the peninsula, it maintained itself in the Himalayas, Burma, and Ceylon. The Buddhist sculptures remain, ranging from Buddh Gaya and Bharhut, of the date of the Mauryan dynasty, 320 to 180 B.C.; Sanchi, before and after our era for several centuries; Amravati and Gandhara, from our era to the 3rd century; to Ajanta and the later caves.

At the present time the most impressive traces of the ancient Buddhism of India may be roughly classified as (1) the sites of the places mentioned as his residences, or scenes of great events in Buddha's life—*e.g.*, Buddh Gaya; (2) Asoka's pillars, marking the stages of his religious pilgrimages, 3rd century B.C., and his rock edicts; (3) the stupas, afterwards modified; the earliest and very interesting bas-reliefs illustrating Buddhist sacred texts—*e.g.*, Sanchi, near Bhopal, and the remains of the Bharhut stupa; (4) certain sites in the N.W., where great monuments existed in the early centuries of the Christian era—*e.g.*, the great stupa of Kanishka, near Peshawar, discovered in 1909, containing a relic-chamber, with a valuable casket and its contents; and the stupa of Piprawa, on the Nepal frontier; (5) the Græco-Buddhist sculptures, collected in museums from Gandhara, showing remarkable devotional art, in which Buddha, his life, and legends, are illustrated in markedly Hellenic style; (6) the later monuments, as at Amravati, on the Kistna, in which Hellenic influence is marked.

Of the 10,721,453 Buddhists in India, 10,384,579 are in Burma; 240,854 are in Bengal; 36,512 in Kashmir; 28,915 in Sikhim; 10,506 in Assam: so that ordinary travellers are likely to come across Buddhists only in Burma, Ceylon, Darjeeling, and Kashmir. Several books on Buddhism have been mentioned in the list on pp. xxx to xxxvii. The best account of the Buddhist religion as it actually affects the lives of the Burmese, is in Sir G. Scott's work, *The Burman, His Life and Notions*. The Buddhist population in Burma are the happiest people on earth. The Pali Text Society is doing much for the elucidation of Buddhism by publishing original Pali works and some translations.

Buddha is generally represented in one of three attitudes—he sits cross-legged, either with his hands in contact in an attitude of profound meditation, or with one hand pointing to the earth, or with both hands raised in the preaching posture. His ears sometimes reach to his shoulders (see Plate 2).

THE JAINS

The founder of this sect, which numbered 1,248,182 persons in India at the census of 1911, was Vardhamāna, commonly known by his title of Mahavira, and designated Nataputta by the rival order of Buddhists. The name of Nirgrantha ("without any ties"), of Parsvanatha's order, attached itself to Mahavira's order, but fell into disuse. Mahavira was born in or about 599 B.C. to Raja Siddhartha, head of the Nata clan of Kshatriyas, settled at Vaisali (the modern Besarh), about 27 m. N. of Patna. His mother was Trisala, a King's daughter. At thirty he adopted a spiritual career and became a monk of the Parsvanatha order. After twelve years his divine mission was recognised; he was entitled Mahavira (Great Hero) and acknowledged to be a Jina (spiritual conqueror), from which the system Jainism and sect Jain are derived. In the Jain hierarchy Parsvanatha was Mahavira's immediate predecessor; from him the sacred hill Parasnath, in the Hazaribagh district, has its name. Mahavira taught his religious system and organised asceticism for thirty years, chiefly in Bihar, in the same area as Gautama Buddha, without conflicting. He died in 527 B.C. at Pawa, in the Patna district. (Buddha 558 to 483 B.C.)

Jainism is a monastic organisation—not strictly a religion. The Jains acknowledged caste, and the Brahmans as priests; their monastic order included four classes—monks, nuns (Svetambaras only), lay-brothers, and lay-sisters. Through this lay element Jainism survived in its monastic settlements and lay communities when Buddhism disappeared. The Svetambaras collected and preserved their sacred books in a Council at Pataliputra, the modern Patna, about 310 B.C.; a subsequent Council at Valabhi, in Gujarat, made a revised edition. In 79 or 82 A.D. a schism took place between the Svetambaras (white-clad) and Digambaras (sky-clad, or naked).

The chronicling spirit is strong in the Jains, who maintain lists of the succession of teachers. Ancient Jain stupas and inscriptions have been discovered. The object of the Jains is to obtain liberation from the bonds of transmigration. As the cycle of re-births runs on unceasingly, the only remedy lies in breaking with life by an abnegation of the world. This is their attainment of Nirvana (liberation from any further re-birth) to be obtained in life, not after death, by

the principles of Right Faith, Right Cognition, Right Conduct. Right Faith is absolute reliance on their founder as *the* Tirthankara, or pathmaker, to Nirvana. There were twenty-four Tirthankaras, from the first, Adinath, to the last three, Neminath, Parsvanatha and Mahavira. Each is known by a symbol (see p. 157). They are to be found principally in Ahmadabad and elsewhere in the Bombay Presidency. For their temples consult p. ciii. Right Cognition means the correct understanding of the Jain theory of the world, which assigns a soul to every individual person or thing. Right Conduct is summed up in five great vows, which include their regard for the minutest creatures of animal life as possessing souls. Only monks can attain Nirvana; nuns cannot reach it, nor can the lay adherents, for whom the vows are relaxed. Jainism has developed by the introduction of a religious cult into their essentially atheistic system. The building of temples and other religious features are excrescences on the pure Jain system, due to the admission of the lay element. The Jains chiefly reside in the trade centres of W. India. Their most famous shrines are at the hill of Parasnath, Palitana, in Kathiawar, and Mount Abu. They differ from Hindus on certain points, while agreeing generally. They maintain pinjrapols, or hospitals, for all decrepit animals. They are great traders and very charitable.

B. BUDDHIST FESTIVALS

The New Year Festival corresponds to the Makar-Sankranti of the Hindus (see p. lxxiv), but in Burma it often takes place as late as April. At a given moment, which is ascertained by the astrologers of Mandalay, a cannon is fired off, announcing the descent of the King of the Naths (genii) upon earth. Then begin the Saturnalia.

The last birth of Gautama is celebrated at the end of April by the worship of his images, followed by processions. In Ceylon the coming of the Buddha to the island is celebrated by a festival in March or April, when the pilgrims visit either his footprint on Adam's Peak or the sacred Bo-tree at Anuradhapura.

C. SOME EARLY HINDU AND BUDDHIST DATES.

	B.C.
The Vedas and hymns	(probably between) 1500-1000
The <i>Mahabharata</i> , an epic poem of the heroic age in N. India; and the <i>Ramayana</i> , an epic poem relating to the Aryan advance into S. India	(both uncertain) 500 B.C.-500 A.D.
Birth of Gautama Buddha (the Enlightened)	(probably) 558
Death of Buddha: First Great Council of Buddhists at Rajagriha, in Magadha	(probably) 483
Second Great Buddhist Council	(about) 383

Alexander the Great crossed the Indus near Attock; defeated Porus at the passage of the Jhelum (Hydaspes); captured a town N.E. of Multan, where he was severely wounded; and then retired to Persia <i>via</i> the Indus and Baluchistan, leaving Greek garrisons behind him	B.C.	327-324
Chandragupta Maurya (Sandracottus) conquered Magadha, and became Emperor of India		322
The Mauryan Dynasty		321-184
Chandragupta received the Greek ambassador, Megasthenes		302
Asoka, grandson of Chandragupta, professed Buddhism, and issued fourteen rock-edicts		257
Asoka's pilgrimage to Buddhist sacred places		249
Asoka's Buddhist Council at Patna; his dissemination of the principles of Buddhism	(after)	242
Asoka's ordination as a monk		240
The Indo-Greek and Indo-Parthian Dynasties	250 B.C.-60 A.D.	
The Sunga, Kanva, and Andhra Dynasties	184 B.C.-236 A.D.	
The Indo-Bactrian Kings	100 B.C.-300 A.D.	
The Malava era dated from the total defeat of the Sakas by the Malavas at Karor, in the Panjab		57 A.D.
The Kushan, or Indo-Scythian Dynasty		45-225
The Northern, Mahayana, form of Buddhism became one of the State religions of China		65
The Saka, or Salivahana, era dated from		78
The fourth and last Buddhist Council held under King Kanishka	(about)	140
The code of Manu, laying down the laws and ceremonies for Brahmans	(of uncertain age, but dated at)	200
The Gupta Empire and the Western Satraps—Chandragupta I. to Kumaragupta I.		320-455
Fa-Hian, the Chinese traveller, visited Buddhist shrines in India		400-411
First invasion of the White Huns		455
The Gupta Empire (continued) and the White Huns		455-606
Second invasion of the White Huns		470-480
The Vikrama era dated from the defeat of the Huns at Mandasor, in W. Malwa, by the Malavas under Yasodharman Vikramaditya		533
The reign of Harsha		606-648
Pilgrimage to Buddhist shrines by the Chinese traveller Hiuen Tsang		629-645
The Mediæval Kingdoms of the North		648-1200
Sankaracharya, the great apostle of Saivism in S. India	(about)	800
Sect of Lingayats founded		in 12th century
Kabir, the religious reformer, born		1398
Birth of Nanak, a Hindu reformer, who preached the abolition of caste, and established the Sikh religion		1469
NOTE.—Some of these dates are quoted from Mr V. A. Smith's "Early History of India."		

THE SIKHS

THE Sikhs¹ are a reformed sect of Hindus who follow a teacher named Nanak, born near Lahore in 1469. The word Sikh means a "disciple" of the Guru or teacher. Except in denouncing idolatry and in welcoming all ranks without distinction of caste, Nanak's

¹ Pronounced like "seeks."

teaching was very similar to that of the worshippers of Vishnu. All the Gurus inveighed against caste ; Guru Govind finally abolished it, established the Sikh religion on a political and military basis, proclaimed as the depository of the principles and doctrines of the Sikh religion the Granth, or holy book, which is now the principal object of the Sikh devotions, and definitely established the Khálsa, as the Sikh brotherhood is called (see pp. 300-1). (Khálsa is from the Arabic *Khális*, which means pure, and was meant by the Guru to indicate the purity of his faith.)

In the middle of the 18th century the Sikhs, who had been gradually rising into power, struggled with the Afghans for supremacy in the Panjab and finally won it. In 1715 Banda had been tortured to death by the Mughals ; but in 1763 they avenged his fate by destroying Sirhind utterly. Banda was not a Guru ; he was an agent sent by Guru Govind Singh from the Deccan to avenge the indignities offered to the Sikhs by the Muhammadans. Sirhind was the place where two of Guru Govind's children were barbarously put to death. The next year, in 1764, they fought a long and doubtful battle with the Afghan Ahmad Shah Durani in the vicinity of Amritsar, and on his retirement they took Lahore, which soon became the centre of their power, Amritsar being the religious centre. The government was at first in the hands of a number of *misls*, or confederacies, which were gradually absorbed by Ranjit Singh of the Sukarchakia Misl, who finally became Maharaja and the head of the Sikhs. Ranjit Singh died in 1839, and his son Kharak Singh and his grandson Nao Nihal Singh died in November the next year, the latter from injuries received from the fall of a gateway as he was returning from the funeral of his father. After an interval Maharaja Sher Singh became ruler of Lahore, and was murdered in September 1843 by the Sindhanwalia Sirdars, who also killed the Prime Minister, Raja Dhian Singh, of Jammu ; and upon this Dhalip Singh, a putative son of Maharaja Ranjit Singh, succeeded. His mother, Rani Jindan, attempted to rule through Hira Singh, son of Dhian Singh, Jowahir Singh, her brother, and Lal Singh, her lover, but the first two of these were murdered, and the real power in the State rested with the army and with Raja Gulab Singh, of Jammu. To relieve themselves of their embarrassments with the former, the Rani and her counsellors encouraged a war with the British, against whom various causes of complaint were alleged, and finally, the army breaking away from all control, crossed the Sutlej at Hari ki early in December 1845, and invaded the territory to which the British asserted their rights. Upon this followed the First Sikh War, which was ended by the battle of Sobraon on 10th February 1846 (p. 353), the Jullundur Doab being annexed to the British possessions, and Kashmir being

transferred to Gulab Singh, grandfather of the present Maharaja, upon payment by him of the war indemnity. The administration of the rest of the Panjab was placed under a council of regency on behalf of the minor Maharaja Dhalip Singh, subject to the advice of the Resident in Lahore, first Sir Henry Lawrence and then Sir Frederick Currie. Matters were progressing as well as could be expected when the incident of Multan (p. 355) occurred on 20th April 1848, upon which the Sikh soldiery and people rose in defence of their national cause. Serious operations against them were not taken till December, when, after unsatisfactory skirmishes at Ramnagar and Sadulpur (22nd November and 3rd December 1848), the Battle of Chilianwala was fought on 13th January 1849 (p. 326), and the victory of Gujarat (p. 325) was won on 21st February. Since then the Sikhs have been among the most loyal subjects of the Indian Empire, of which they proved the main support in 1857, and provide some of the best recruits of the Indian army.

The following is a chronological table of the Sikh Gurus. Guru Govind refused to name a successor. He said: "He who wishes to behold the Guru, let him search the Granth."

THE TEN GURUS OF THE SIKHS

	BORN.	GURU. till he died, 1538
1. Nanak, founder of the Sikh sect	1469	1538-1552
2. Angad	1504	1552-1574
3. Amar Das	1509	1574-1581
4. Ram Das, builder of the original lake-temple at Amritsar	1534	1581-1606
5. Arjan Mal, compiler of the Adi Granth	1563	1606-1645
6. Har Govind, first warlike leader	1595	1645-1661
7. Har Rai, his grandson	1630	1661-1664
8. Har Krishna, died at Delhi	1656	1664-1675
9. Tegh Bahadur, put to death by Aurangzeb	1622	1675-1708
10. Govind Singh remodelled the Sikh Govern- ment	1666	
Banda (not a Guru), put to death by Bahadur Shah in 1715.		

The twelve principal Misl (confederacies), each under a Sirdar, or Chief, were:—

1. Bhangi, so called from the addiction of their leaders to bhang, a preparation of hemp.
2. Nishanias, standard-bearers.
3. Shahid, or Nihang, martyrs and zealots.
4. Ramgarhia, from Ramgarh, at Amritsar.
5. Nakkais, from the tract of country called Nakka, S.W. of Lahore.
6. Ahluwalia, from the village in which Jassa, a head of the Misl, lived.
7. Kanheya, from a place near Lahore.
8. Faizulpuria, or Singhpuria, from villages near Amritsar.
9. Sukarchakia, from the name of a place: the clan of Ranjit Singh.
10. Dulewalia, from a village near Lahore.
11. Krora Singhia, or Panjgarhia, from name of leader.
12. Phulkian, from Phul, the progenitor of Nabha, Patiala, and Jind.

The Sikhs are known now either as Malwai (which comprises those S. and E. of the Sutlej and Beas) or Manjha (lying N. and W. of these, and principally in the Bari Doab between the Beas and Sutlej and the Ravi). They are represented among the ruling Chiefs of India by the three Phulkian houses, of which the Maharaja of Patiala and the Rajas of Jind and Nabha are the heads, and by the Rajas of Kapurthala and Faridkot, the first three and the last in the Malwai country and the fourth in the Jullundur Doab. The present ruling family of the Jammu and Kashmir State, which is Dogra Rajput by descent, is no longer Sikh by religion. It should be remembered that a Sikh is not necessarily born of that religion, but is baptized into it when of adult age, and that in consequence some of the sons of Sikhs fall back into the Hindu religion by simply not taking the *pahal*, as the initiatory rite, usually performed at the Amritsar temple, is called. The greater proportion of the Sikhs are called Sahijdhari (those who live at ease and practise trade or agriculture), and are not baptized at all. They do not consider it necessary to wear the habiliments of the Sikhs.

In his work, in six volumes, on *The Sikh Religion*, 1909, Mr M. A. Macauliffe wrote—"To sum up some of the moral and political merits of the Sikh religion: It prohibits idolatry, hypocrisy, caste exclusiveness, the cremation of widows, the immurement of women, the use of wine and other intoxicants, tobacco-smoking, infanticide, slander, pilgrimages to the sacred rivers and tanks of the Hindus; and it inculcates loyalty, gratitude for all favours received, philanthropy, justice, impartiality, truth, honesty, and all the moral and domestic virtues known to the holiest citizens of any country." According to the census of 1911, the Sikhs in India numbered 2,171,908, of whom 2,093,804 were in the Panjab, 30,345 in the N.W. Frontier Province, and 11,887 in the Bombay Presidency.

THE MAHRATTAS (ALSO MARÁTHAS)

ANOTHER remarkable people in India who deserve brief notice are the Mahrattas, who derive their name from the country of Maharáshtra, which they occupied in the early Aryan days. They had been noted as a fighting race in the armies of Ahmadnagar and Bijapur before they came prominently to notice as the opponents of the Mughals in the person of their famous leader Sivaji (1627-80), who set the example of ravaging distant territories by his raid on Surat in 1664 (p. 164). His son Sambhaji was captured, blinded, and executed by the Emperor Aurangzeb; and his grandson Sahu, who was brought up by one of the daughters of that Emperor, proved when released to have none of the hardy Mahratta qualities, and abandoned all

power to his Minister, a Konkan Brahman of the name of Balaji Vishvanath (who became the first Peshwa), and sank to the rank of Raja of Satara. This house came to an end in 1848, but the Kolhapur Chief still represents the family of Sivaji, though not in direct descent from that great leader. The first Peshwa marched to Delhi in 1718, and in 1720 obtained the right of "chauth"—the famous Mahratta demand of one-fourth of the revenues of every country which they could dominate—over the Deccan. The second Peshwa, Baji Rao I. (1721-40), seized Malwa, which was ceded to the Mahrattas under his successor, Balaji Baji Rao (1740-61), under whom Janoji, son of Raghoji Bhonsla, the Chief of Nagpur, and then the leading Mahratta feudatory, invaded Bihar and Bengal, and obtained a cession of Orissa, and of the chauth of Bengal from the Murshidabad Viceroy, Ali Vardi Khan. During his life, which is believed to have been terminated by grief at the crushing defeat of the Mahrattas at Panipat by Ahmad Shah Durani, the Gaekwar and the Holkar and Scindia Chiefs came to the front; and his son Madhu Rao (1761-72) was rather the head of five separate branches of the Mahratta people than of the people as a whole. The Gaekwars extended their power through Gujarat and the north of Bombay, and Scindia and Holkar established themselves in Malwa, and gradually enlarged their authority over Rajputana and the Ganges Doab, with the capitals of Agra and Delhi. The Mahrattas overran Rohilkhand (1771-73), which was the remote cause of the famous Rohilla War. The titular Emperor of India, Shah Alam, placed himself in the hands of the Mahrattas in 1771, and remained under the control of Scindia till 1803. The sixth Peshwa, Madhu Rao Narayan, (1774-95), who succeeded as an infant, was practically superseded by his Minister, Nana Farnavis: it was the war of succession between him and his uncle Raghoba which led to the first interference by the British in Mahratta affairs and the First Mahratta War in 1775-82. The last Peshwa, Baji Rao II., nominally ruled from 1795-1818. The Mahratta Princes forced him into war with the English, and in the campaigns which ensued in 1803-4 Scindia and the Bhonsla Chief were destroyed in the South at Assaye (23rd September 1803) and Argaum (28th November 1803), while Scindia's forces in the North were crushed at Delhi (11th September 1803) and Laswari (1st November 1803), and Jaswant Rao Holkar was defeated at Dig (23rd December 1804), and finally compelled to submit. The last general Mahratta war took place in 1817-18, in which the Peshwa was defeated at Kirki (5th November 1817), the Bhonsla Chief at Sitabaldi (26th to 27th November 1817), near Nagpur, and Holkar at Mahidpur (21st December 1817). The Peshwa was deported to Bithur, near Cawnpore, and died there in 1853; his adopted son, the Nana

Sahib, stands for ever infamous as the author of the Cawnpore massacre of 27th June 1857. It will be seen from the above brief narrative that, when the British commenced to acquire inland territories in India, the Mahrattas were the dominant people of the country from the Kistna to Delhi and from Gujarat to Orissa ; and there can be no doubt that but for British interposition they could have extended their power over Hyderabad and Mysore to the extreme South of India, just as they had already occupied Tanjore, and over Bengal and Bihar in the North. Unlike the Sikhs, the Mahrattas have lost their warlike qualities, and are now mostly a race of sturdy agriculturists, though some of them are highly educated and advanced politicians ; their numbers, according to the last census, were about 3,700,000. The Bhonsla House died out in 1853 on the death of the successor of Appa Sahib (p. 125), who had been deposed. The principal Chiefs of the Baroda House have been Damaji Gaekwar, the founder (died 1721), Damaji II. (1731-70), Sayaji Rao I., Khande Rao (1857), and Mulhar Rao, who was deposed in 1875. The present Chief is His Highness Maharaja Sir Sayaji Rao III., G.C.S.I. (born 1863, adopted 1875). Of the Scindia family the most famous rulers have been the founder Ranoji, Mahdaji Scindia (died 1794), his grandnephew Daulat Rao Scindia (died 1827), and (battles of Panniar and Maharajpur, both on 29th December 1843) Jaiaji Rao Scindia (died 1886). The present Chief is Major-General Maharaja Sir Madho Rao Scindia, G.C.S.I. (born 1876). The principal Chiefs of the Holkar House have been the founder, Mulhar Rao, who retreated from Panipat, Ahalya Bai (1765-95) (pp. 123-4), Jaswant Rao Holkar (died 1811), Mulhar Rao Holkar (died 1833), Baiza Bai, regent, and Tukaji Rao Holkar II. (died 1886). The present Chief is Maharaja Tukaji Holkar III. (born 1890). The actual Mahratta population in these three States is very small—viz., in Baroda 17,000, in Gwalior 12,000, and in Indore 6000.

THE PARSIS

THE Parsis, formerly inhabitants of Persia, are the modern followers of Zoroaster, and now form a numerous and influential portion of the population of Surat and Bombay. Of their total number—100,096 in India in 1911—80,980 were in the Bombay Presidency and nearly 14,000 in Native States, of whom nearly 8000 were in the Baroda State, nearly 2600 in Bombay States.

When the Sassanide Empire was destroyed by the Muhammadans in 651 A.D. the Zoroastrians were persecuted, and some of them fled (c. 717) to India—first to Diu, in Kathiawar, then to Sanjan, about 25 m. S. of Daman, where the ruler of Gujarat became their protector,

and for some hundreds of years they lived there and in the neighbourhood in peace and quiet, finally making Navsari their headquarters. In the 16th century they suffered considerably from Muhammadan persecution until the time of the British occupation. The sacred fire, which Zoroaster was said to have brought from heaven, is kept burning in consecrated spots, and temples are built over subterranean fires. The priests tend the fires on the altars, chanting hymns and burning incense. They do not worship the sun or fire, as is often commonly supposed. "God, according to Parsi faith, is the emblem of glory, refulgence, and light, and in this view a Parsi while engaged in prayer is directed to stand before the fire, or to direct his face towards the sun, as the most proper symbols of the Almighty." There are fire-temples in Bombay for public worship. The Dasturs are their high priests. A partially successful attempt was made in 1852 to restore the creed of Zoroaster, which had become corrupted by Hindu practices, to its original purity. In order not to pollute the elements, which they adore, the Parsis neither burn nor bury their dead, but expose their corpses to be devoured by birds (see "Towers of Silence,"¹ Bombay, p. 20). There has long been a marked desire on the part of the Parsis to adapt themselves to the manners and customs of Europeans while in many respects maintaining their own scrupulously. The public and private schools of Bombay are largely attended by their children. They largely follow commercial pursuits, and several of the wealthiest merchants of India belong to this community. Their public spirit and charity are well known. Benevolence is their first principle, and is fully practised.

PARSI MONTHS

There are twelve months, of thirty days each, to which five days are added at the end. They approximate as below to the English months.

1. Farvardin, September.	7. Mihr, March.
2. Ardibihisht, October.	8. Avan, April.
3. Khرداد, November.	9. Adar, May.
4. Tir, December.	10. Deh, June.
5. Amardad, January.	11. Bahman, July.
6. Sharivar, February.	12. Asfandiyar, August.

THE PARSI FESTIVALS

Pateti, New Year's Day—the 1st of Farvardin. The Parsis rise earlier than usual, put on new clothes, and pray at the fire-

¹ The vernacular name of these structures is Dokhma.

temples. They then visit their friends and join hands, distribute alms, and give clothes to servants and others. This day is celebrated in honour of the accession of Yezdajird to the throne of Persia, 632 A.D.

Farvardin-Jasan, on the 19th of Farvardin, on which ceremonies are performed in honour of the dead, called Farohars, or "protectors." There are eleven other Jasans in honour of various angels.

Khurda-sal, the birthday of Zoroaster, who is said to have been born 1200 B.C. at the city of Rai, or Ragha, near Teheran ; but the date of Zoroaster has not been authentically fixed.

Jamshidi-Nauroz, held on the 21st of Mihr. It dates from the time of Jamshid, and the Parsis ought to commence their New Year from it.

Zurtoshte Diso, held on the 11th of Deh in remembrance of the death of Zartasht, or Zoroaster, in Bactria.

The Muktaḍ, held on the last ten days of the Zoroastrian year, including the last five days of the last month and the five intercalary days called the *Gatha Gahambars*. A clean place in the house is adorned with fruits and flowers, and silver or brass vessels filled with water are placed there, and ceremonies are performed in honour of the souls of the dead.

ARCHITECTURE

STYLE and decoration in architecture are largely conditioned by the character of the materials employed. In primitive India, as among the poorer classes of to-day, the materials most commonly in use were mud or mud bricks, bamboo canes, and other kinds of wood. The simplest kinds of dwellings were constructed of screens of bamboos inwoven with palm branches or the like, the roofs being either flat or arched. In the latter case the bamboos were lashed together at the apex and tied in near the lower end, thus forming a singularly strong framework of curvilinear form, while the walls were strengthened to resist the outward thrust. In other cases the walls were constructed of unbaked brick or mud, and the latter material was also used as a covering for the flat roofs or for plastering the screens of the walls on the "wattle and daub" principle. Later on cut timbers came to be used in the more pretentious dwellings, and afforded opportunities for the development of that exuberant surface decoration in which the genius of India has always excelled. No kiln-burnt bricks have yet been found of a date earlier than the 5th century B.C., though it is likely enough that their manufacture was understood long before then, particularly in the N.W. of India. On the other hand, the potter's

art was practised in India from time immemorial, and concrete made of broken potsherds and *kankar* lime was employed for floors at least as early as the 8th century B.C., while roof tiles of terra-cotta were fashioned quite a century before the art of stone-cutting was practised. Lime mortar was used in pre-Muhammadan monuments in Kashmir two or three centuries B.C.

These materials left their character deeply and permanently impressed on Indian architecture. From the use of the bamboo came the curvilinear type of roof, which was afterwards reproduced in cut timber and subsequently in stone, and from which was evolved the familiar *chaitya* arch used over doorways and windows. Log capitals were imitated in stone, the more finished timbering of walls and roofs and gateways in the same materials, every detail, down to the nail heads, being copied with sedulous care and accuracy by the masons of later days. As a protection against white ants wooden posts were set, as they still sometimes are, in *gharas*, or jars of earthenware, and from these resulted the "pot and foliage" base, so beautifully developed in the Gupta age. Ignorance of the use of mortar made the construction of true arches and domes impracticable in the pre-Muhammadan period, but arch and dome forms were not unknown, and were imitated both in brick and stone, usually by corbelling the masonry. A striking illustration of the influence exerted by brick as contrasted with wood construction is to be found in the pillars of the cave temples. In the earliest examples the stone pillars are manifestly copied from wooden and are relatively slender, though amply thick enough for their purpose. In the later examples, on the other hand, the pillars are heavy and cumbersome—not because extra strength was required, nor yet, probably, in order to save labour, but because they were copied from the brick-in-mud pillars of famous structural *viharas*, which necessarily required to be much thicker in proportion to their height than columns of stone.

This close adherence to tradition constitutes the gravest fault of Indian architecture; for it has led to the perpetuation of primitive forms long after they have lost their *raison d'être*, and has deterred the builders from adapting their ideas to new conditions. Conservatism in art is of value in so far as it results in preserving what is appropriate and beautiful; it becomes a defect when it leads to the atrophy of effort and inventiveness.

Apart from the walls built of ponderous Cyclopean masonry and a few dwellings of the same character at Rajagriha, the earliest structures known to exist in India are the houses recently excavated at Bhita (p. 44), which date back to the 4th century B.C. They were constructed of burnt brick laid in mud, with brick and plaster floors, timbered ceilings, and pitched—probably curvilinear—roofs,

protected by tiles and adorned with finials of terra-cotta,¹ their plan being similar to that of the Buddhist monasteries, of which they are manifestly the prototype. Dressed stone work does not appear to have been introduced into India until the time of Asoka (250 B.C.); but the few examples which we possess belonging to that period, namely, the famous pillars or *lats* of Asoka, the caves in the Barabar Hills, and a monolithic rail at Sarnath, display in the precision with which they were cut and in their exquisite finish a mastery over material such as was never afterwards equalled by Indian masons, and which even the marble work of the Parthenon does not surpass. This complete mastery over material, coupled with the Perso-Hellenic character of the sculptures which adorn the *lats*, leaves little room for doubt that the monuments in question were the handiwork of Asiatic Greeks, or of Indian craftsmen working under their immediate direction.

From this time onwards stone came more and more into prominence, and in the Sunga period (180-70 B.C.) was being freely used by the Buddhists for their sacred monuments. To this epoch belong the famous railings of Bharhut, Buddh Gaya, and Sanchi—all of them manifestly in imitation of wooden models, and adorned with sculptures which, in spite of the introduction of many Western-Asiatic motifs, exhibit a truly indigenous character. Of these three railings, that at Bharhut is the most primitive, that at Sanchi the most developed; and it is interesting to observe how rapidly the art of sculpture improved in the relatively short space of time which intervened between them. The reliefs of both series are simple and naturalistic in style, appealing directly to the feelings by their human sympathy. In the former, however, the carving is wooden to a degree, the figures "frontal" and archaic, and the scenes lacking in composition. In the latter the modelling of the figures becomes free and plastic, there is vitality in their movements, more feeling for decorative effect in composing them, and in general more æsthetic beauty. This rapid artistic development is also remarkably well illustrated in the Mathura School, where a comparison of the sculptures of this epoch, few though they are, is the more significant in that they were produced in one and the same place.

Contemporary with these Buddhist *lats* and railings are the earlier rock-cut temples of Western and Eastern India, which, however, do not belong exclusively to the Buddhists. These rock-cut temples are mainly of two types, the so-called *chaityas*, or chapels, and the *viharas*, or monasteries, in addition to which *stupas*, or *dagobas*,²

¹ For an illustration of a tiled roof of this kind, see Cunningham, *Stupa of Bharhut*, Pl. xxvi., 7.

² = the "pagoda" of Burma and the dagoba of Ceylon.

as they are sometimes termed, are often formed out of solid rock. In addition to the chapels of Mauryan date in Bihar alluded to above, notable examples of *chaityas* are to be found at Karli, Bhaja, Bedsa, Nasik, Ellora, Ajanta, and Kanheri. In plan, as in purpose, they are remarkably similar to the early Christian *basilicas*, being divided by two rows of columns into a nave and two narrow side-aisles, which are continued around the apse at the farther end. The *viharas* usually consist of a rectangular hall with cells around and, in the later examples, a shrine in the back wall, the roof being frequently supported by columns, often richly carved. In determining the relative age of both *chaitya* halls and *viharas*, it may be taken as a general rule that the nearer they approximate to wooden construction the older they are. Thus in the *chaitya* halls at Bhaja and Kondana, which are two of the oldest, the façade screens in front of the chapels are actually made of timber, the excavators not having yet attempted to reproduce them in stone; while at Bhaja also, as well as at Karli, Bedsa, and Kanheri, wooden ribs are employed beneath the soffit of the vaulting, as if the solid rock above required support! But this index of age must not be pressed too far; for it is not to be presumed that an equal rate of progress was simultaneously maintained by all the builders; and other structural and decorative features, therefore, must be taken into account—such as the leaning of the pillars, which at first slope inwards but afterwards become vertical, and the plastic character of the sculpture, the evolution of which is pursued along clear and definite lines.

The form of the original structural *chaityas* and *viharas* could, until recently, only be surmised from the cave temples and monolithic *rathas*, but not long ago the Archæological Department discovered a complete *chaitya* hall of brick at Ter, in the Deccan, and another of stone has still more recently been found in the Almora district of the United Provinces. The excavations, too, of the Archæological Department at Sarnath, Kasia, and other places, now leave little room for doubt as to the design of the ancient *viharas*, while at the same time they discount the theory propounded by Fergusson that the structural *vihara* took a pyramidal form like the square *rathas* at Mamallapuram.

The foreign influences discernible in Indian architecture in the Mauryan and Sunga periods, and which must have been strong in the N. of the peninsula during the rule of the Greek Kings of the Panjab, received a fresh and powerful stimulus during the first centuries before and after Christ, when a Hellenistic school of art was established in the N.W. frontier. This school, known as the 'Gandharan' from the ancient Province of that name, was devoted exclusively, so far as is known, to the service of Buddhism. Its

architecture is chiefly characterised by a diaper-patterned masonry, in which massive blocks of stone are employed, with layers of small stones or bricks to fill the interstices between them ; by the use of rounded or pointed arches constructed on the corbel system ; by the free use of classical forms and motifs, such as the Corinthian capital and the undulating garland ; and by the great wealth of decorative bas-reliefs illustrating the life and previous births of the Buddha. It is in the Gandhara School that the earliest representations of Buddha were evolved, and it was, no doubt, largely due to the immediate popularity which iconism won among the Buddhists that the influence of Hellenistic art spread so widely and rapidly in India. Even before the time of the Kushan Emperor Kanishka we find the wave of this influence spreading over Hindustan and permeating the indigenous school of Muttra (Mathura), while a little later it makes itself felt at Amravati, in Madras, though its force was largely spent when it reached that distant place.

With the rise of the Gupta Empire in the 4th century A.D., Indian architecture and Indian art entered on a new phase. Under the foreign domination of the Scythian rulers, and during the troublous times which ensued on their downfall, indigenous talent had been largely stifled and suppressed ; but with the achievement of political independence there followed a remarkable intellectual revival, which affected architecture and the plastic and pictorial arts no less than literature, and which is comparable in many respects to the Renaissance that Europe experienced in the 15th century. The spirit of the age, it need hardly be said, was not the same as it had been four centuries before, and the changes which had come over the social life and religious ideas of the people in the meantime are clearly reflected in their architecture. The naïve simplicity of earlier days now gives way to more conventional expression ; the natural yields to the ideal, the humane to the spiritual ; but the artistic feeling of the people has lost none of its force, and a new charm is imparted to it by the very restraint which the intellectuality of the age has imposed. The Gupta epoch, indeed, which extends from the 4th to the 7th century A.D., is mainly remarkable for its intellectual treatment of architectural forms, for the appreciation shown of plain surfaces and of the contrast of light and shade, and most of all, perhaps, for the vitality and freshness of its plastic and pictorial decorations, which, in spite of their richness, are used with almost classical refinement and restraint.

The best preserved monuments of the Gupta epoch are to be found among the cave temples of Western and Central India (*e.g.*, Nos. 16, 17, and 19, at Ajanta, several of the later Buddhist caves at Ellora, and those at Udayagiri, near Besnagar), in the carved brick

temples of Bhitargaon and other places in the Cawnpore district, decorated with spirited terra-cotta reliefs, in the flat-roofed temples at Tigawa and Deogarh, and in the Dhamek *stupa* at Sarnath,¹ where recent excavations have thrown a flood of light on the art of this period. The type of flat-roofed temple has usually been regarded as the peculiar product of the Gupta builders, but the flat roof is too common a feature in the East to be ascribed to the invention of any particular epoch, and it is rather in the treatment of mouldings and door frames and in other decorative details that the Gupta character of these structures manifests itself. As a fact, almost every form of roof construction, from the ancient *chaitya* ridge roof to the Northern steeple, must have been employed in the Gupta times. The powerful and vitalising effect of Gupta art spread far and wide over the whole Indian peninsula, and to countries far beyond, long surviving the dynasty from which it takes its name. Indeed, it is safe to say that no phase of art has ever made such a deep and enduring impression upon the countries of the middle and farther East. In the Himalayan tracts it is found vigorously flourishing in Chamba, Kulu, Mandi, and other regions towards the West, where numerous temples of stone, or of stone and timber combined, exhibit in their decorative carvings and other details the closest analogy with Gupta monuments of the plains. In Kashmir and the Salt range it combined with classical elements, derived probably from the older Hellenistic art of Gandhara, to produce a local style, of which the most characteristic features are high pitched roofs, gables, trefoil arches, and quasi-Doric columns. The most notable example of this style is the well-known Temple of the Sun at Martand, near Islamabad, which was erected about the middle of the 8th century by King Lalitaditya. The more ornate temple at Avantipur is about a century, and the miniature shrine at Payer about two centuries, later.

From the many and various styles of architecture which were taking shape during the Gupta epoch there emerged in the mediæval ages, besides a number of subsidiary varieties, three leading types, each of which produced monuments of imposing grandeur and magnificence, though their ornateness contrasts unfavourably as a rule with the greater refinement of earlier decoration. Of these three styles the so-called Indo-Aryan prevailed over Hindustan, being rarely found South of the Tapti and Mahanadi rivers. Its most salient feature is the curvilinear steeple divided into vertical bands, which rose above the square sanctuary, and was frequently repeated on a smaller scale in other parts of the building, or in miniature by way of decorative device. The purest and, withal, the most imposing examples of this

¹ Wrongly ascribed by Fergusson to a much later date.

style are to be found among the temples at Bhubaneswar, in Orissa, which, numbering, as they do, several hundreds, and ranging in date from the 9th or 10th to the 13th century, afford a remarkably instructive illustration of the progress of the style. Another very important group at Khajuraho, in Bundelkhand, includes buildings dating mainly from the 10th and 11th centuries, and belonging to Jains as well as to Hindus. Though built on a less pretentious scale than those of Orissa, they undoubtedly surpass them in perfection of symmetry and elegance of details.

A singularly lovely variety of this Indo-Aryan architecture is commonly known as the Jain style, though as a fact it was used indiscriminately by the Hindus and Jains alike throughout Western India. It is distinguished, by the free use of columns to obtain a more spacious area in the interior of the *mandapams*, by the employment of strut brackets as an additional support to the lintels, and by the exquisitely fine carving of ceilings and columns, which are elaborated with a delicacy that has never, perhaps, been surpassed. The most perfect, and highly ornate models of this style are the two Jain temples on Mount Abu—the one, built by Vimala Sah in 1031 A.D., the other, two centuries later, by Tejpal. Other admirable models are at Nagda, near Udaipur, where the style is employed by Hindus and Jains alike, and at Girnar and Satrunjaya, in Gujarat.

In sharp, clear contrast with the architecture of the North stands the Southern or "Dravidian" style, as it has been suitably termed from its prevalence among the peoples who speak the Dravidian tongues. As it is a distinguishing characteristic of Indo-Aryan architecture that its most prominent lines tend to the perpendicular, so it is a characteristic of Dravidian that they tend to the horizontal; and while in the former style the most conspicuous feature is the curvilinear steeple, in the latter it is the pyramidal tower, rising storey upon storey in horizontal bands, each bounded by straight lines and crowned by a *chaitya* or domical roof. In the later examples of this class the main shrine is enclosed by a quadrangle, or by several such quadrangles, set one within the other, which are entered through lofty gateways or *gopurams*, and which often enclose great corridors or *prakaras*, pillared halls, and minor shrines.

The rise of this style is first traceable among the rock-cut *rathas* at Mamallapuram, on the sea-shore south of Madras, which are to be ascribed to about the 7th century A.D. These monolithic *rathas* are either square or oblong in plan, the square ones being the prototype of the *vimanas*, or temples proper of Southern India, while the oblong, which are manifestly modelled on the design of the Buddhist *chaitya* halls, subsequently develop into the great *gopurams* of later times. The next valuable landmarks in the history of this style are furnished

by the Kailasanatha and Vaikuntha Perumal temples at Conjeeveram, belonging to the first half of the 8th century, and by the Virupaksha temple at Pattadakal, built in the reign of Vikramaditya II. (733-747 A.D.), while a little later comes the rock-cut temple of Kailasa, at Ellora, far to the North of the Tamil country.

A further stage in the development of Dravidian architecture was reached under the Chola Kings, Raja Raja and his son Rajendra (A.D. 985-1035), the first of whom is responsible for the Great Temple at Tanjore, the second for a similar temple on a smaller scale at Gangaikondapuram, in the Trichinopoly district. These and the vast edifices of later date, with their spacious quadrangles and mighty *gopurams*, form, to quote Fergusson, "as extensive and in some respects as remarkable a group of buildings as is to be found in Provinces of similar extent in any part of the world—Egypt, perhaps, alone excepted; but they equal even the Egyptian in extent." They consist, as a rule, of a square base, ornamented with tall, thin pilasters, and containing the *vimana* or shrine, in front of which is frequently a hall (*mandapam*), or even two, though this feature is not essential. Over the shrine is the pyramidal *sikhara*, or tower, referred to above, always storeyed, and crowned with a circular or polygonal dome. The *gopurams* are placed at the entrances to the surrounding courts, and face the cardinal points, their general design being that of the shrine, though their width is about double their depth, and their proportions frequently far more imposing than the latter. In the case of the Great Temple at Tanjore, the *sikhara* over the shrine, rising in eleven storeys to a height of 190 ft., entirely dominates the gateways, but at the Srirangam Temple, near Trichinopoly, the converse is the case, the relatively insignificant shrine being overmastered by the *gopurams* of the courts, each of which as one passes outwards is more lofty and decorative than the last. Remarkable as it may seem, this arrangement, which is characteristic of very many later Dravidian temples, is the natural outcome of a perfectly logical development; for the shrine, being the most essential structure, was the first to be erected, and as its fame and wealth increased court after court was added round it, each more imposing and magnificent than the last, the successive stages of building being traceable in the plans and details of the structures.

Intermediate between these two main styles—the Indo-Aryan of the North and the Dravidian of the South—comes the architecture of the Deccan, which prevailed mainly over the basin of the Godavari, though examples of it are found outside this area and even as distantly remote as the Himalayas. This is the style to which the term Chalukyan was given by Fergusson, though as a fact its most typical and perfect models were erected under the Hoysala and not

under the Chalukya rulers of the Deccan. It was evolved partly from the Southern, partly from the Northern style, and in its infancy exhibits a close approximation to the one or the other of these, though, speaking generally, it is nearer akin to the Dravidian than to the Indo-Aryan, preserving, in particular, the general plan adopted in the shrines of the former type. Later on it gradually acquired distinctive traits of its own. The plan becomes polygonal and star-shaped instead of quadrangular; a high and richly-carved base following the same outline, is added to the temple; and the high storeyed *sikhara* of the roof is converted into a low pyramid, in which the horizontal treatment of the South is combined with the perpendicular treatment of the North. On the early evolution of this architecture useful light is thrown by the temples at Aihole and Pattadakal in the South of the Bombay Presidency, where the cradle of this style is perhaps to be located; and in the same Presidency some fine examples of the more mature Deccan type exist at Dambal, Rattihalli, Tiliwalli, and Hangal. In Hyderabad, too, there are some magnificent monuments of this class at Ittagi, Nilanga, Buchanapalli, Warangal, and many other places. But it is in Mysore, among the temples at Hallabid, Belur, Somnathpur, Nuggehalli, and elsewhere, that the style is found in its full perfection. The treatment of details in these monuments is extremely rich and varied, and the fancy displayed in the sculptured decoration wildly exuberant. Yet wonderful as this decoration is, and eloquent of the infinite pains and labour expended on its production, the paramount beauty of these temples is due almost more to their grace and symmetry and to the singularly happy proportions maintained between their various component parts; while the ever changing play of light and shade on the broken surfaces of their walls and roofs adds a charm unmatched even in Gothic art.

Religion has so great an influence upon Architecture that the different styles in India may be most conveniently classified as Buddhist, Jain, Brahman, and Muhammadan.

Buddhist.—Though Gautama taught in the 6th century B.C., his religion made little progress before its adoption by the great Asoka, who reigned from 272 to 231 B.C. The palaces, halls, and temples which may have existed before the time of Asoka were made of wood, and have perished. There was no stone architecture in India before that date, and all the monuments known to us for five or six centuries after it are Buddhist.

Every sanctified Buddhist locality was marked by the erection of a tope (stupa) commemorating some holy event or containing relics, in which case the tope was called a dagoba. The relics of a dagoba were usually contained in a sort of box or case at the summit of it

called a tee (or *ti*). Older even than the tope was the memorial pillar, called stambha, or lat, if it was carved out of one stone; these pillars bore Buddhist emblems—such as lions or wheels—and were afterwards converted in various parts of India into pedestals for lamps or vehicles of the gods, and the like. Rails are found surrounding topes, or enclosing sacred trees, pillars, etc. The chaityas, assembly halls or temples, correspond to the churches of the Christian religion; the viharas are monasteries (see plans at pp. 105 and 464).

The best known topes are those at Sanchi (p. 140) and Sarnath (p. 71). There are also a number of them scattered over the ancient province of Gandhara, the capital of which was Peshawar—especially at Manikyala (p. 329). In Ceylon there are topes or dagobas at Anuradhapura and Polonnaruwa (pp. 681 and 687). The lats, or pillars, stood in front of, or beside, each gateway of every tope, and in front of each chaitya (pp. 462-3). Many of these were erected by Asoka, and two of these are still in existence at Delhi, and a more complete specimen at Allahabad. (The Iron Pillar in the mosque at Old Delhi is not Buddhist, but seems to be dedicated to Vishnu.) The most interesting rails are at Sanchi and Buddh Gaya; the remains of the Bharhut rail are at Calcutta, and of the Amaravati (p. 459) rail in the British and Madras Museums. There are fine examples of torans, or gateways, with the rail at Sanchi.

Our knowledge of the chaitya chapels, or temples, and the viharas, or monasteries, is derived mainly from the rock-cut examples (but see pp. 141-2). This method of working is easier and less expensive than the process of building. For a cave nothing but excavation is required; while for a building the stone has to be quarried, transported,—perhaps a long distance,—and then carved and erected. According to Mr Fergusson,¹ the complete excavation of a temple, both externally as well as internally, would cost only about one-tenth of the expenditure necessary for building; and the Buddhist caves were still cheaper, as the rock was not cut away all round, the interior chamber alone being excavated. Examples of chaityas are to be found at Karli, Bhaja, and Bedsa (pp. 462-5), Bihar (pp. 50-1), Nasik, Ellora, Ajanta, and Kanheri (p. 26). They usually consist of a long excavation, separated by two rows of columns into a nave, and two narrow side aisles. At the farther end of the cave is either a small tope or a figure of Buddha, behind which also the colonnade runs; and in the front wall over the entrance-door is a large horse-shoe window, which allows the light to fall directly on the tope, or image. A vihara is usually a large rectangular hall, with cells off it round the sides, and a shrine chapel in the back wall. The hall is commonly

¹ *History of Indian and Eastern Architecture*, I, 349.

borne by columns, often richly carved, and is approached by a veranda; and in some cases it had a forecourt in front of this. In a few instances these halls consisted of two, and even three, storeys. The most notable specimens are at Udayagiri and Khandagiri (pp. 445, 447), Bhaja and Bedsa, Ajanta (p. 56), Nasik, Kanheri and Ellora, and at Jamalgarhi and Takht-i-bahi, near Peshawar.

Among the most characteristic details of Buddhist sculpture are the patterns representing rails and horse-shoe windows, the figures of Nāga devotees over-canopied by cobra hoods, and probably intended to represent aboriginal residents of India, and scenes of worship (by animals as well as by human beings), of topes, sacred trees, and emblems of the Buddhist religion—the wheel, trident, swāstika cross, etc., which also recur in the decoration generally.

Jain.—The architecture of the Buddhists proper was succeeded by that of the *Jains*, who were great builders. Unlike the Buddhists, they were not great excavators, though some examples of their cave-work exist at Ellora. The characteristic Jain feature is the horizontal archway, which avoids the strain from the outward thrust of a true radiating arch. Indeed, with the exception of some specimens of the time of Akbar, no radiating arch exists in any Buddhist, Jain, or Hindu temple in India up to the present day. Another Jain feature is the carved bracket form of capital, which, springing from the pillars at about two-thirds of their height, extends to the architraves, and forms a sort of diagonal strut to support them. The leading idea of the plan of a Jain temple was a number of columns arranged in squares (see pp. 210-211). Their domes, like their arches, were built horizontally, on eight pillars forming an octagon, with four external pillars at the angles to form a square. The lateral pressure of a dome built on the radiating plan by the Roman, Byzantine, or Gothic architects prevents the use of elegant pillars, great cylinders with heavy abutments being necessary. The construction of the Jain domes, being horizontal, allows of more variety than can be given to the vertical ribs of Roman or Gothic models, and has rendered some of the Indian domes the most exquisite specimens of elaborate roofing that can anywhere be seen. The Indian dome allows the use of pendants from the centre, and these have a lightness and elegance never imagined in Gothic art. On the other hand, they are necessarily small, and require large stones, while a dome on the radiating principle can be built of small bricks. The Jains often built their temples in groups, or cities of temples, as at Palitana (p. 202), Parasnath (p. 53), Girnar (p. 209), Mount Abu (p. 181), and Khajraho (p. 160). Their love of the picturesque led them to constrict their cities sometimes on hill-tops, as at Mount Abu, and sometimes in deep and secluded valleys. The two towers of Fame and of

Victory at Chitor (p. 130) are also examples of Jain work, and splendidly carved specimens of their characteristic pillars, dating from the 10th to 12th centuries, still exist in the great mosques at the Kutb Minar, S. of Delhi, and in Ajmer, Ahmadabad, and Belgaum (p. 485). Of modern Jain architecture the most notable specimens are at Sonagir (p. 147) and Muktagiri, the temple of Hathi Singh (A.D. 1848) at Ahmadabad, the temple at Delhi, about one hundred years old, and the temples at Calcutta.

Brahman architecture is divided by Mr Fergusson into the three styles of Dravidian, Chalukyan, and Indo-Aryan. The *Dravidian*, or Madras, architecture is best seen at Tanjore, Tiruvalur (p. 479), Srirangam, Chidambaram, Rameswaram, Madura, Tinnevely, Conjeeveram, Coimbatore, and Vijayanagar (p. 516). "There is nothing in Europe that can be compared with these Dravidian temples for grandeur and solemnity, and for parallels to them we must go back to ancient Egypt and Assyria" (Sir G. Birdwood). The oldest of the Dravidian temples date from about the 11th century; but in their present form few can go back as far as the 13th, and most are of even more modern date. Quite the oldest temples in India, dating from the 7th to 8th centuries, are those at Pattadakal and Aiwalli, near Badami (p. 500). The shrine itself, which is called the *vimana*, is always square in plan, surmounted by a pyramidal roof of one or more storeys; a porch, or *mandapam*, covers the door leading to the cell in which the image of the god is placed; the gate pyramids, or *gopurams*, are the principal features in the quadrangular enclosures which, with numerous other buildings, surround the *vimanas*. The chief Dravidian rock-cut temples, which, unlike the Buddhist caves, are excavated externally as well as internally, are at Mamallapuram (p. 599) and Ellora. The Palaces exhibit Muhammadan influence, having the Moorish pointed arch. They are to be found at Madura, Tanjore, Vijayanagar, and Chandragiri (p. 478).

The *Chalukyan* style was at its best in the province of Mysore during the three centuries A.D. 1000 to 1300, when the Bellalas ruled there. They erected groups of temples at Somnathpur (p. 530), Belur, and Hallabid (p. 525). Other Chalukyan examples are at Warangal and Hanamconda (p. 515). This style is remarkable for elegance of outline and elaboration of detail. The artistic combination of horizontal with vertical lines, and the play of light and shade, especially in the Hallabid example, far surpass anything in Gothic art. The animal friezes begin, as is usual in India, with elephants in the bottom line, then lions, then horses, and then oxen, above which are pigeons or other birds.

Examples of the *Indo-Aryan*, or Northern style, exist at Bhubaneswar (pp. 445, 448), the black pagoda at Kanarak, the temple

of Jagannath at Puri, all dating from the 11th and 12th centuries, the Garuda pillar at Jajpur (p. 443), Khajraho, the Teli-kamandir at Gwalior, the temple of Vriji at Chitor, the golden temple of Biseswar at Benares, the red temple at Brindaban, and the modern temple erected by Sindhia's mother at Gwalior. There are rock-cut temples of this style near Badami and at Ellora.

The finest Indo-Aryan Palaces, besides the Man Singh Palace at Gwalior, are at Udaipur, Datia, Orchha (pp. 147 and 158), Amber (p. 196), and Dig (p. 226). The beauty of Hindu architecture is greatly enhanced by the use of picturesque sites, either on hills, in valleys, or where the æsthetic value of water may be utilised. At Rajasamudra, in Udaipur, for example, the *band* or dam of the artificial lake is covered with steps, which are broken by pavilions and kiosks, interspersed with fountains, the whole forming a fairy scene of architectural beauty. Of modern Indo-Aryan civil architecture the best specimens are the tombs of Sangram Singh and Amar Singh at Udaipur, and of Bakhtawar Singh at Alwar. The latter shows the foliated arch which is so common in Mughal buildings; and it also shows the Bengali curved cornices, whose origin was the bending of bamboos used as a support for the thatch or tiles.

The history of *Muhammadian* art¹ is dated from about 1200 A.D., the time of the Ghor dynasty and the Slave Kings at Delhi. So many as twelve or fifteen styles of Muhammadian architecture have been distinguished in India, but in all there will be found domes and arches (usually pointed) derived from the Bagdad style, and that again from the ancient vaulted architecture of Mesopotamia. The chief styles are the so-called Pathan and the Mughal. The former (1193-1554 A.D.) prevailed in Northern India. The early Muhammadian conquerors found in the colonnaded courts of the Jain temples nearly all that was required for a mosque. They had only to remove the temple in its centre and erect a new wall on the West side, adorned with niches (*mihrrabs*), pointing toward Mecca, in front of which they added a screen of arches, with rich carvings. The earliest principal works are at Delhi—the Kutb Mosque and Minar, and the tomb of Iyaltimish (Altamish); at Ajmer—the mosque; and at Budaon—the gateway of the mosque. Hindu masons were employed in their constructions, which retained, consequently, some Hindu characteristics. Mr Fergusson (*Ind. Arch.*, 2, 204) considered that the carving of the screen at the Kutb Mosque, Delhi, is, without exception, the most exquisite specimen of its class known to exist anywhere. He also considered (2, 206) that the Kutb Minar “both in design and finish far surpasses any building of its class in the whole

¹ *A History of Fine Art in India and Ceylon* by V. A. Smith (p. 391).

world," and that Giotto's Campanile at Florence, "beautiful though it is, wants that poetry of design and exquisite finish of detail which marks every moulding of the Minar." During the Pathan period the mosques usually had neither minarets nor prominent domes.

But the outlying Provinces of the empire invented styles of their own expressive of their local peculiarities. These can be seen at Jaunpur, the capital of the Sharki dynasty (1394-1476); in Gujarat, especially Ahmadabad, while independent (1396-1572); in Malwa, similarly (1401-1531), (pp. 124-125); at Gaur and Pandua, in Malda (pp. 416-418), (1203-1573). S. of the Narbada the Bahmani rulers (1347-1525) constructed their buildings of various styles at Gulbarga (p. 474) and Bidar. Bijapur and Golconda (p. 511) also had their special fashions in building.

With the advent of the Mughals, the *Mughal* Indo-Persian style displayed the foreign influence in Muhammadan architecture. Of Babar's (1526-30) works only two mosques now remain—at Panipat and Sambhal; and the same number are due to Humayun—all purely foreign and Muhammadan. Akbar was, in architecture as in religion, extremely tolerant, and his buildings exhibit marked Hindu features. The chief of them still in existence are the tomb of his father Humayun, near Delhi, distinctly Persian in style, but differing in respect of its marble material; also the town of Fatehpur-Sikri, the fort at Allahabad, the palace at Lahore, and the red palace in the fort at Agra, which by some authorities, in spite of its Hindu features, is ascribed to Jahangir. Among the latter's contributions to Indo-Persian architecture were the tombs of Akbar at Sikandra, of Anar Kali at Lahore, and I'timad-ud-daula at Agra. Shah Jahan, under whom the Mughal power reached its zenith, was the greatest of all Indian builders. There is a great contrast between the manly vigour and exuberant originality of Akbar and the extreme elegance of his grandson, which rapidly tended to become effeminate. Shah Jahan built the Jami Masjid at Delhi, the inner fort and palace at Agra, the Moti Masjid, or Pearl Mosque, there also, and the Taj Mahal, perhaps the most beautiful building in the world. In these works, wrote Mr V. Smith, the Indo-Persian style, by universal consent, attained supreme beauty. But the style, though essentially Persian, was distinguished from the Persian practice by the lavish use of white marble, by the *pietra dura* decorations, beautiful open-work tracery, grandeur, and elegance. His son Aurangzeb was a religious fanatic, who has left little save the mosque at Lahore, another small one at Benares, and the tomb at Aurangabad. The reign of this bigot was marked by a rapid decline in art, including architecture; the Persian style, consequently, showed deterioration. "In many places modern architects have effected a graceful compromise between

the Hindu and Muhammadan styles by combining Persian domes with Bengali bent cornices and Hindu or half-Hindu columns. Excellent examples of this pretty though feeble style, as used for both civil and religious buildings, are to be seen at Mathura (Muttra) and in hundreds of other localities. It is quite impossible to tell merely from inspection of the architecture whether a building is intended for Muslim or Hindu use" (V. Smith, pp. 419-20). Foreign innovations, he adds, were subjected to the irresistible pressure of native taste and methods. In Sind the style was Persian, both in form and decoration. The later examples of Mughal architecture at Lucknow have been described as shoddy, and pretentious abominations, degraded in taste, partly attributable to European influence. The style of the Muhammadan dynasty of Mysore (1760 - 99), though not so degraded as Lucknow, was poor and inartistic.

As mosques in India always face East, they should be seen of a morning.

Among other styles should be mentioned the ruins at Martand and other places in Kashmir, which bear evidence of classical influence, and the modern Golden Temple of the Sikhs at Amritsar.

The *Burmese* pagoda, with its thin spire, has been evolved from the solid hemispherical dome of the Buddhists. The best examples are at Prome, Pagan, Rangoon, Mandalay, Pegu, and Moulmein. A small example may be seen in the Eden Gardens, Calcutta.

THE PRESERVATION OF ANCIENT MONUMENTS AND ANTIQUITIES

As the architectural monuments of India will specially attract the attention of visitors, so the means taken for their preservation is bound to be a subject of interest. In the earlier days of British rule the Government was too much concerned with laying the foundations and extending the borders of its new Empire to pay much heed to the relics of old ones, and though a few spasmodic efforts were made, notably by the first Lord Minto, by Lord Hastings, and Lord Amherst, to save a few of the most celebrated structures round Agra and Delhi from decay, they resulted only in the accomplishment of some perfunctory repairs. The first real step towards asserting official responsibility in archæological matters was taken by Lord Canning, who in 1860 established the Archæological Survey of Northern India. The function of the new Department, however, as well as of the local surveys which were afterwards instituted in Madras and Bombay, was confined to the description of monuments and to antiquarian research, the critical task of conservation being still left to the Local Governments, who made fitful efforts to discharge it according to the

caprice of successive Governors or Lieutenant-Governors, but always without expert guidance or control.

It was not until 1878 that the Supreme Government awoke to the deplorable condition into which the national monuments were steadily sinking, and the then Viceroy, Lord Lytton, allocated a sum of 3½ lakhs to the repair of buildings in the N.W. Provinces, and pressed for the appointment of a special Conservator to guide and control the operations of the Local Administrations. This post was sanctioned two years later, and was held for three years by Major Cole, who accomplished much during that brief period towards the repair of various famous structures, notably those in the Gwalior fort and at Sanchi. Then reaction set in; the post of Conservator was abolished in 1883, that of the Director-General six years later, after which there followed a period of almost complete apathy and neglect. In 1895 came another change of policy, when proposals were made to parcel out the country into several circles, each with its own archæological surveyor, who was to make conservation his first and foremost duty. This scheme, which, be it remarked, made no provision for the exercise of any central control, was still being considered when Lord Curzon became Viceroy and threw himself with characteristic energy into the task of organising the whole Department on a firm administrative basis and of asserting definite—and, it is much to be hoped, permanent—Imperial responsibility. With this end in view the Provincial Departments were established on a more efficient and liberal footing, and were united together under the control of a Director-General, provision at the same time being made for assisting local Administrations out of Imperial funds. Further—the functions of the new Department were closely defined and systematic principles laid down for its guidance, special prominence being given to the conservation of monuments—without, however, prejudicing other fields of labour. Finally, in its efforts to safeguard all classes of historic monuments and relics, Lord Curzon's Government took extensive powers by legislation for the protection of those in private possession, as well as for State control over the excavation of ancient sites and traffic in antiquities; and, by dint of encouragement and assistance, secured towards the same object the active co-operation of the Ruling Chiefs.

The result of these wise and comprehensive reforms has since become manifest in the changed conditions of the ancient buildings of India and Burma. Under the direction of Sir John H. Marshall, C.I.E., the Archæological Department has during the last decade overhauled all the more important groups of monuments, besides a multitude of isolated relics throughout the country, and has prosecuted a vigorous and far-reaching campaign of repair among them, at the

same time formulating a systematic programme for their future treatment. Those who visited the great monuments of India before Lord Curzon's Viceroyalty will realise the extent of the work accomplished since then. At the Taj Mahal at Agra, for instance, a whole village of huts has been swept from in front of the entrance, and the once squalid approaches reconverted into green lawns and peaceful courts; stately gardens, with their ancient water-courses, fountains, and parterres, have taken the place of dense overgrowth and jungle; and the many edifices grouped around the tomb, which formerly served but as a blemish to its beauty, have been rescued from decay; so that the whole scene is one of unrivalled loveliness. In the Agra fort, again, the palace of Jahangir has undergone complete repair; the modern military prison with all its excrescences has been removed from the Akbari Mahal; an ugly arsenal yard around the hall of audience has given place to the old colonnaded court; and many of the other buildings have been conserved and beautified in a like degree. A similar process of careful reconstruction and repair is now going on in the Lahore fort, and has already been practically completed in the fort at Delhi, where all the ancient structures of value have been recovered from the military and repaired, and their gardens excavated from the accumulated débris in which they were buried and laid out on their former lines. At Ajmer the embankment of the Anasagar Lake can boast of, perhaps, the most complete transformation of all. One by one a row of modern bungalows has been removed from it, and from their ruins have risen again the pure white marble pavilions of Shah Jahan, reconstructed with scrupulous care from the dismantled materials. Other famous and beautiful fabrics of the Mughals which have been rescued from deep-seated decay are the mausolea of the Emperors Humayun, Akbar, and Jahangir; the small but priceless tomb of I'timad-ud-daula and the Chini-ka-rauza at Agra; the tombs of Tagah Khan and Isa Khan at Delhi, the mosque of Dai Anga at Lahore, and the so-called Zenana Palace in the fort of Allahabad.

It would take too long to speak of the Department's achievements at the other main centres of Muhammadan power—at Mandu, the mighty fortress of the Malwa Kings, and at Dhar, in Central India; at Ahmadabad and Bijapur, in Bombay; or at Gaur and Pandua and Rohtasgarhi, in Bengal. Suffice it to say that what has been done among the Mughal remains has been done in equal measure among these earlier groups of Moslem architecture, and in an equal measure, too, among the Hindu and Buddhist monuments in both India and Burma. The temples of Khajuraho and Bhubaneswar, of Conjeeveram, Sompalle, and Vellore; the royal palace and monasteries at Mandalay; the pagodas of Pagan; the vast array of civil and

religious edifices at Vijayanagar; the topes at Sanchi and Sarnath; the sculptured cave temples of Western India and Orissa; and the Mutiny monuments at Lucknow—the Residency, Dilkusha Palace, and Sikandar Bagh—all these and many more besides, that have been singled out for their historic associations or the exquisite beauty of their architecture, have been taken in hand and protected against the further ravages of time.

A special feature of all this work has been the rescue of many of these buildings from profane and sacrilegious uses and their restitution to the faith of their founders—or, at least, to safe custody as protected monuments. Until a few years ago the exquisite Pearl Mosque of Jahangir, in the Lahore fort, was used as a Government treasury, while the Sleeping Hall of Shah Jahan did duty as a Church for the British troops. Dai Anga's tile-enamelled mosque in the same city had been turned into a railway office and ruthlessly mutilated in the process. In the Delhi fort the Rang Mahal and Naubat Khana were used as officers' quarters; and a soldiers' canteen was located in the Salimgarh at Agra. The former desecration of the pavilions of Shah Jahan at Ajmer has already been mentioned. At Bijapur a D.B. has been expelled from one mosque, the relics of a British post-office from another; at Lucknow a mosque has been recovered, which was formerly used as a dispensary, and another in the Vellore fort, which was tenanted by a police officer; the lovely *masjid* of Siddi Saiyad at Ahmadabad has ceased to be a cutcherry; the cave temples at Trichinopoly are no longer godowns; and at Mandalay the Church and club have been expelled from the throne rooms of the Burmese Kings.

In conclusion, it remains to be said that the new Archæological Department has undertaken, for the first time in India, the scientific exploration of buried sites, and by its investigations at Charsadda, Sahri Bahlol, Shah-ji-ki-dheri, Bhita, Sarnath, Kasia, Saheth-Maheth, Hmawza, and elsewhere, has thrown a flood of new light on the architecture and art and history of early India and Burma. In the collections of antiquities made at these sites, and in other collections which the Department has brought together at Peshawar, Delhi, Muttra, Sarnath, Mandalay, Pagan, and other places, the student of Indian archæology will now find an abundance of materials systematically arranged and catalogued.

It may also be noted here that much has been done in the last twenty-five years under competent artistic advice to produce suitable buildings of architectural merit in India, especially in Bombay and Madras, by Mr Stephens and Mr Chisholm, by Colonel Sir Samuel Swinton Jacob, K.C.I.E., in Rajputana, and by the late Mr Lockwood Kipling, C.I.E., and Rai Bahadur Ganga Ram, in the Panjab.

INDIAN ART WORK

THE FINE AND INDUSTRIAL ARTS

THE latest writer, Mr Vincent Smith, late I.C.S., in his great work, *A History of Fine Art in India and Ceylon, from the Earliest Times to the Present Day*, has discriminated between Fine Art, as work showing creative power in a greater or lesser degree, and the Industrial or Applied Arts—that is, work which is merely the outcome of skilled hereditary craftsmanship. His main topics are sculpture and painting, with some references to architecture. Some persons have denied the existence of Fine Art in India. The latest opinion is that Indian Art is only one manifestation of Asiatic Art, and that in Asia genuine Art, quite independent of the Hellenic tradition, has existed for ages and still lives. A new school glorifies Indian Art for its idealism, passionless restraint, restrained dignity, spirituality, ascetism, glorying in the fact that mediæval sculpture is so peculiarly and exclusively Hindu as to be often unintelligible to the ordinary well-educated critic.

Mr Fergusson wrote of Indian sculpture, that when it “first dawns upon us in the rails at Buddh Gaya and Bharhut (250 to 200 B.C.), it is thoroughly original, absolutely without a trace of foreign influence, but quite capable of expressing its ideas. Some animals—such as elephants, deer, and monkeys—are better represented there than in any sculptures known in any part of the world ; so, too, are some trees, and the architectural details are cut with an elegance and precision which are very admirable.” Mr V. Smith, accepting the existence of Indian Fine Art, but not the extreme views as to the superiority of Hindu Art, is convinced that India has produced works of fine art in sculpture—such as that of Sanchi, Bharhut, Mathura, etc.—and in painting—such as the Ajanta frescoes, ranging from about 50 A.D. to 642 A.D.—entitled to high rank on their æsthetic merits, and not merely on account of their historical and antiquarian interest. Accepting the striking originality of Indian Art, Mr V. Smith states that “India has borrowed many things from abroad during the long course of the ages, but it is a trite observation, easily proved by many instances, that she always so transmutes her borrowings as to make them her own. Such transmutation is equivalent to originality.” Indian Fine Art is a by-product of religious emotion, but to be classified according to age and country, not according to creed. Its tradition is held by many to be a possession of priceless value to the Indian peoples.

The history of Indian Art begins with the Mauryan Emperor Asoka (272 to 231 B.C.), who patronised Buddhism. The expression of early Art was nearly all Buddhist. In Asoka's time the dominant foreign influence was Persian, traceable clearly in his monolithic columns (about 30) and other works. The Greek element, expressed in Asiatic Hellenistic forms, is apparent, especially through the influence of the stone bas-reliefs of Alexandria. But whatever Indian sculptors borrowed they made their own in character. There are numerous echoes of Greek Art in the Gandhara sculptures. The Greek influence ended by 400 A.D. The substantial originality of Indian Art is supported by an examination of the foreign influences upon Indian pre-Muhammadan Art. Modern Art is continuous with the Brahmanical (including later Buddhist) Art, which was evolved during the 7th and subsequent centuries, exalting the ascetic ideal, and reflecting the teachings of Puranic and Tantric literature. Indo-Muhammadan Art began about 1200 A.D., the architecture, domes, and arches, being based on the style practised at Bagdad, with some Hindu features. The Indo-Persian style prevailed in N. India, applied to Hindu traditions and details. In some instances—*e.g.*, the colonnades at the Kutb, Delhi, and the great mosque at Ajmer—the decorative work is purely Hindu, portions of old temples having been incorporated.

It is suggested that in India *painting* was an indigenous Art, earlier than sculpture, possibly a branch of a widely-diffused Asiatic school, unconnected with Greece or Rome. Early Hindu painting had merits and deserved credit for substantial originality. Its history closes with the Ajanta frescoes in 642 A.D., and reopens with the introduction of the foreign Persian style by order of Akbar about 1570 A.D. The Art so introduced into India was largely Mongol in subject and treatment, with marks of strong Chinese influence. Sir M. A. Stein's recent discoveries in Central Asia, as described in his book, afford evidence of the existence of this influence in that region. The Indo-Persian and Mughal school attained a high standard in portraiture, especially miniatures; but the art lacked greatness. The beautiful decoration of the Mughal period is Industrial rather than Fine Art. Of late years many pictures have been produced by students trained in European methods, chiefly at the Government Schools of Art: the latest movement is in favour of following Indian ideals.

The excellence of Indian Industrial Art production is to be found in its pottery, metal work, carving, jewellery, weaving, dyeing, and embroidery. In these directions the Indian artisan is remarkable for his patience, accuracy of detail, thoroughness, and artistic sense of both colour and form. The elaboration of ornament in the best Indian metal ware

or carving, the composition of colours in the best Indian carpets, or enamel, and the form of the best Indian pottery, have seldom, if ever, been excelled. Much of the skill of the Indian handicraftsman is due to the hereditary nature of his occupation. The potter, the carpenter, the smith, the weaver, each belongs to a separate caste; a son inevitably follows the trade of his father, and the force of custom, with generally a religious basis, impels him to imitate his father's work. The result is that the form and workmanship of artisan work is almost exactly the same now as it was thousands of years ago, and that the artisan, with great technical and imitative skill, has little creative power. While the caste theory holds generally, carpenters, stone-carvers, and even smiths, not unfrequently work in any material indifferently, like certain workers in mediæval Europe. The combined competition and prestige of Europe have created a tendency to imitate European methods. The best work used to be done, at leisure, to the order of the wealthy Princes and nobles of an ostentatious native court. Many of these courts have now ceased to exist, while others have declined in purchasing power and in influence. The authority of the trade guilds, and of caste, has been relaxed under the freedom of British rule, and the importation of British goods has materially affected certain crafts. British supremacy, having produced peace, has almost destroyed the armourer's trade, which is now diverted into damascening curios at many places; the fancy cheap cotton goods of America and Britain have displaced the muslins of Dacca; aniline dyes and jail work have nearly killed the old carpet industry. Whether the Schools of Art which the Government has established in India have hastened or retarded the process of degeneration is a much-disputed point. The Schools have been defended, with some success, for preventing degeneration: all depends on their Principals. Some trades which were dying out have been resuscitated by their efforts, and the mania for imitating European designs is sometimes effectually diverted from the worst to the best examples, and in some cases native crafts have actually been revived. The effective working of these institutions is a task which requires much delicacy of perception as well as firmness of touch, as there is always great risk that a School which contains principally casts from the antique and details of Italian and Gothic ornament will affect the purity of indigenous ideals, which is much to be deplored. To restrain rather than to strengthen the tendency to imitate the designs and methods of the dominant race should be the aim of Art Education throughout the country. In S. India the indigenous Art industries have to some extent decayed, but in recent years there has been an unquestioned revival of the handicrafts of the Madras Presidency, the artisans being encouraged by the sale of

their work at the Victoria Technical Institute, Madras. Defects in Indian art ware may be found under any of the following heads—“(1) bad design ; (2) overcrowding of ornament ; (3) mixture of styles ; (4) adaptation of the ornament or workmanship of one district or province, or even country, to the forms and materials of another ; (5) carelessness in execution ; (6) haste ; (7) unsuitability of form to the particular purpose required ; (8) inferior materials and appliances” (*Journal of Indian Art*, No. 119, p. 48).

In the general sketch of Indian *Industrial Arts*¹ which follows certain places are mentioned as being noted for particular work ; but it should be remembered that the small towns are gradually losing their specialities, the best workmen drifting steadily towards the larger centres. A visit is recommended to the art collections in the Indian Museum at S. Kensington before the visitor to India leaves England.

Nearly every Indian village has its *potter*, who is kept constantly at work making domestic utensils of baked clay, for in many households no earthen vessels can be used a second time. The forms of the utensils which he makes are of great antiquity and beauty. The best glazed pottery is made in the Panjab, of blue and white, and in Sind, of turquoise blue, copper green, dark purple, and golden brown, under an exquisitely transparent glaze. The usual ornament is a conventional flower pattern, pricked in from paper and dusted along the pricking. The Madura (Madras) pottery deserves mention for the elegance of its form and richness of its colour. Multan pottery had greatly degenerated at the Delhi Darbar Exhibition of 1903. The Bombay School of Art no longer produces imitations of Sind ware. In the Panjab and Sind, and especially at Tatta (p. 361) and Hyderabad, there are many good specimens of encaustic tiles on the old Muhammadan mosques and tombs. One of the finest examples is the mosque of Wazir Khan at Lahore.

Metal work is now chiefly exhibited in caskets, trays, salvers, vases, bowls, jewellery or personal ornaments, perfume-boxes, etc., with great attention to decoration, rather than in military arms and implements. The Panjab has long produced *gold* and *silver* work, and especially parcel-gilt sarahis, or water-vessels, of elegant shape and delicate tracery. The gold and silver-ware of Kashmir, Cutch, Lucknow, Bombay, Ahmadnagar, Cuttack (p. 444), is worthy of mention ; Tanjore produces silver work on brass and copper. The hammered repoussé silver work of Cutch is of Dutch origin. The

¹ Mr N. T. Mukharji's *Art Manufactures of India* (1888) may be consulted for further details ; also the *Journal of Indian Art and Industry* (1883 to date) may be recommended as containing much valuable, and the latest, information.

embossed silver work of Madras, with Dravidian figures in high relief, is called Swami ware.

Domestic utensils in *brass* and *copper* are made all over India, the Hindus using the brass and the Muhammadans the copper. The brass is cleaned by scrubbing with sand or earth and water; the copper periodically receives a lining of tin. The copper bazar of Bombay is celebrated, and so is the brass and lacquered ware of Moradabad (p. 372). Benares and Jaipur are famous for cast and sculptured mythological images and emblems. Plates, cups, jewellery, etc., of Kansha (bell metal) are made at Burdwan (p. 55) and Midnapore (p. 442). Other places noted for brass and copper ware are Nagpur, Ahmadabad, Nasik, Poona, Murshidabad, and Tanjore. The Kashmir and Peshawar ware has marked Persian features. Personal ornaments, very generally replicas of traditional and antique types, are mostly made in *base metal*,—as bracelets, anklets, amulets, rings,—sometimes in gold and silver. Base metal—copper and brass mixed—is used for vessels by Hindus in S. India, especially at Tanjore and Tirupati. Nepalese brass work shows itself in lamps of various shapes, incense-burners, boxes, bells, drinking-cups, of interesting forms and beautifully decorated, made by the attractive mediæval *cire perdue* process.

The artisans of India were formerly very skilful in the use of *iron* and *steel*. Mr Fergusson said of the iron pillar in the Kutb Mosque at Old Delhi, to which he assigns the date of A.D. 400, that "it opens our eyes to an unsuspected state of affairs to find the Hindus at that age capable of forging a bar of iron larger than any that have been forged even in Europe up to a very late date, and not frequently even now. It is almost equally startling to find that, after an exposure for fourteen centuries, it is unruined, and the capital and inscription are as clear and as sharp as when the pillar was erected" (see pp. 454-5 also). Sir G. Birdwood says: "The blades of Damascus, which maintained their pre-eminence even after the blades of Toledo became celebrated, were, in fact, of Indian steel."¹ Indian *arms* are characterised by their superb, and sometimes excessive, ornamentation. But the modern work in iron, steel, and arms is not of much importance. Nepal and Bhutan are still renowned for the manufacture of arms, especially swords and knives.

Damascening is the art of encrusting one metal upon another. The best or true damascening is done by cutting the metal deep, and filling it with a thick wire of gold or silver. The more common process is to heat the metal to a blue colour, scratch the design

¹ *The Industrial Arts of India.*

upon it, lay a thin gold or silver wire along the pattern, and then sink it carefully with a copper tool. The art comes from Damascus, hence its name. Damascening in gold is carried on chiefly in Kashmir, Gujarat, and Sialkot (p. 323), and is called "koft" work. In silver or iron it is called bidri, from Bidar (p. 505), in the Nizam's dominions, where such work is still made, though it is now produced principally in Lucknow and some at Purnea, in Bengal; both "koft" work and bidri are false damascening. True damascening is called "*tai-i-nishan*" work, in which the design is outlined by soft gold or silver wire hammered into deeply-chiselled grooves in the steel or iron. Arms are still made in this way at most of the Princes' courts in Rajputana, Malwa, etc. A cheap imitation of koft work is made with gold leaf.

Enamel is an artificial vitreous mass, ground fine, mixed with gum water, applied with a brush, and fixed by fusion. In the champlevé enamelling of Jaipur—the best in India, perhaps in the world—the colours are placed in depressions hollowed out of the metal, and are made to adhere by fire. The Jaipur artist is renowned for the purity and brilliance of his colours and the evenness with which they are applied. He is particularly famous for a fiery red, which is unique. For enamel on gold—besides Jaipur—Delhi and Benares may be mentioned; on silver, Multan, Bahawalpur, Kangra, Hyderabad (Sind), Karachi, Abbottabad (p. 334), Bhuj Cutch (p. 201), Lahore, Kangra (p. 305), and Kashmir; on copper, the Panjab and Kashmir. A quasi-enamel, the mode of preparation being kept secret, is made of green colour at Partabgarh, and of blue at Ratlam (p. 128). *Glass* was known in India at the time of the *Mahabharata*; glass bangles and other ornaments are made all over the country. Alwar produces engraved gold and silver *plate*, and *book-binding*.

The splendour of Indian *jewellery* is due to the free use of diamonds, rubies, emeralds, and other gems, some of them mere scales so light that they will float on water. A dazzling variety of rich and brilliant colours is thus produced by means of gems which are valueless except as splashes, points, and sparkles of gorgeousness. Rings for the fingers and toes, nose and ears; bracelets, armlets, anklets, nose studs, necklaces made up of chains of pearls and gems; tires, aigrettes, and other ornaments for the head and forehead; chains and zones of gold and silver for the waist—such are the personal ornaments in daily use amongst men and women, Muhammadans and Hindus. One reason for the great popularity of gold and silver jewellery is that it is portable wealth, easily preserved. The silver filigree work—an art of very ancient origin—of Cuttack, Dacca, and Ceylon, generally with the design of a leaf, is remarkable for delicacy and finish. For gold and silver jewellery,

Trichinopoly, Vizagapatam (p. 457), Delhi, and Ahmadabad are noted. Silver fish, flexible-jointed, are made in the Monghyr district. Each article of Bhutan jewellery is a work of art. The best enamelled jewellery comes from Jaipur, Delhi, Benares, and Hyderabad (Deccan). The old Delhi work in cut and gem-encrusted jade is highly prized. The *pietra dura* *inlaid work* of Agra was fully developed in the Taj Mahal by Austin de Bordeaux. While Florentine in origin and style, the designs have a thoroughly local character.

The well-known Bombay boxes are a variety of inlaid woodwork called appliqué. Indian lacquer, so-called, is really *lac turnery*. In it the surface is obtained by pressing a stick of hard shellac to a rapidly revolving wooden object. The friction develops heat sufficient to make it adhere irregularly. Further friction with an oiled rag polishes the surface. The lac is obtained from the incrustations made by the female of an insect (*coccus lacca*) on the branches of certain trees. The numeral lakh, signifying 100,000, is derived from the enormous number of these insects found on a small area. The chief consumption of lac in Europe is for sealing-wax and varnishes. All over India it is used for walking-sticks, mats, bangles, and toys. Lac-turned wooden and papier-mâché boxes and trays are made in Kashmir, Sind, Panjab, Rajputana, Bareilly (p. 373), and Kurnool, Madras (p. 520). Of small objects, the mock ornaments for the idols, made of paper, should be noted at Ahmadabad and in most parts of India. Artificial flowers and models of the temples are made of the pith of the sola plant, whence the "sola topi," or sun-hat of pith.

Skilful *carving* is done at Bombay in black wood, for doors or furniture, in a style derived from the Dutch. At Ahmadabad the black wood is carved into vases, inkstands, and other small objects. Jack wood also is carved in rectangular forms at Bombay. Sandalwood is carved and commonly enriched with ornament in marquetry at Bombay, Surat, Ahmadabad, Kanara (p. 571), Mysore, and Travancore; ebony at Nagina (p. 372) and Bijnor; ivory at Amritsar, Delhi, Benares, and Vizagapatam. Wood-carving is universal throughout Nepal, Sikhim, and Bhutan. Nepal excels in it; many of the houses and all the temples are most beautifully ornamented and decorated, the doors, windows, eaves, etc., being profusely carved. Sylhet (p. 438) is noted for its ivory fans, Ratlam for its ivory bracelets, and Vizagapatam for boxes of ivory and stags' horn. Ivory-carving is carried on in the Travancore State, and is widely known through the Trivandrum School of Arts. Figures of animals and of the gods are carved in white marble at Jaipur, Ajmer, and in Rajputana generally. Excellent building stone, as, for example, the white marble of the Taj, is found in Rajputana, where it is carved for

architectural purposes. At Fatehpur-Sikri (Agra) models of the ruins are carved in soapstone. Models in clay of fruit and figures are admirably made at Lucknow, Poona, and Calcutta. The terracotta statuettes produced at Lucknow by Bhagwant Singh have been very highly, perhaps extravagantly, praised by competent European artists. In the cities of Gujarat, and wherever the houses are made of wood, their fronts are elaborately carved; this is especially the case in various cities in the Panjab, notably in Lahore. Certain towns in the Panjab are centres of wood-carving.

India was the first of all countries that perfected weaving, sewing not being practised until after the Muhammadan invasion. The Greek name for *cotton* fabrics, *sin*don, is etymologically the same as India or Sind. The word *chintz* is from the Hindu *chhint*, or variegated, while *calico* is from the place of its production, Calicut (p. 568). In delicacy of texture, in purity and fastness of colour, in grace of design, Indian cottons may still hold their own against the world—but not in cheapness. The *phulkari* (a coloured cotton sheet, sewn in many places with coarse coloured silk) is common everywhere. The famous Dacca muslin (p. 437), one pound weight of which could be made to cover a fabulous extent, is now superseded by the machine-made goods of Europe and America; and European *chintz* now takes the place of the palampore (*palangposh*), a kind of bedcover of printed cotton produced at Masulipatam. Painted cottons have always been a famous Madras industry. *Weavers* generally are in reduced circumstances, through European competition; but efforts are being made to revive their art. In the Panjab the weaver's trade still flourishes, but large quantities of the cheaper cottons are now made in India by machinery. In Nepal, Sikhim, and Bhutan the weavers work in cotton, wool, and silk, producing excellent patterns and colouring. Pure *silk* fabrics—striped, checked, and figured—are made at Lahore, Agra, Benares, Hyderabad (Deccan), and Tanjore. Gold and silver brocaded silks, called *kincobs* (*kimkhwab*),¹ are made at Benares, Murshidabad, and Ahmadabad. The printed silks which are worn by the Parsi ladies of Bombay are a speciality of Surat. Bahawalpur is noted for its damasked silks. Most of the raw silk comes from China. The Muhammadans are forbidden by their religion to wear pure silk, but may wear it mixed with cotton. Gold and silver wire, thread lace, and foil are made all over the country, for trimming shoes and caps, for stamping muslin and *chintzes*, for embroidery and brocades. With such skill is the silver wire prepared, that two shillings' worth of silver can be drawn out to 800 yards. The best *embroidery*, remarkable for its subdued elegance and harmonious

¹ This word is a hybrid, but is connected with *kin*, Chinese for gold.

combination of brilliant colours, comes from Kashmir, Lahore, and Delhi. The patterns and colours diversify plane surfaces without destroying the impression of flatness. Much tinsel is used, but the result has not a tinselly appearance. The famous Kashmir shawls are made of the fine, flossy, silk-like wool obtained from the neck and underpart of the body of the Himalayan goat. Originally a speciality of Kashmir, they are now made in the Panjab also, especially at Amritsar. They have greatly deteriorated since the introduction of French designs and aniline dyes generally. The finest of the woollen stuffs is called *patu* in Kangra and Kashmir. A rough but remarkably durable *patu* is made from goat's hair. The shawls called Rampur *chadars* are made at Amritsar and Ludhiana (p. 298), of Rampur wool (*pashm*, *pashmina*). The intrinsic difference between Eastern and Western decorative art is revealed in Oriental *carpets*, where the angular line is substituted for the flowing, classical "line of beauty." The Oriental carpet is also more artistically dyed, and is decorated according to the true principles of conventional design. As a rule the pile carpets of India and Persia are of floral design, while those of Central Asia, Western Afghanistan, and Baluchistan are geometric. In Persia and India the source of many of the patterns is the tree of life (though some contest this theory), shown as a beautiful flowering plant, or as a simple sprig of flowers. The *dari* is a carpet of cotton made chiefly in Bengal and Northern India; but the most common cotton carpet is the *shatranji*, made throughout India, but especially at Agra. The principal patterns are stripes of blue and white, and red and white. In point of texture and workmanship the rugs from Ellore (p. 458), Tanjore, and Mysore are the best. Good rugs and carpets are made in Madras city. Costly velvet carpets embroidered with gold are made at Benares, Delhi, and Murshidabad. The carpets of Malabar are now the only pile woollen carpets made of pure Hindu design. Fine carpets are made at Amritsar by the well-known firm of Devi Sahai Chamba Mal. Sikhim and Tibet produce excellent rugs and carpets, unspoiled by the use of aniline dyes, as sufficient dyes are obtained locally. Mirzapur (p. 46) has long been famous for the carpets made there. Central Asian carpets are best purchased at Amritsar, Peshawar, and Quetta. For art manufactures in Burma, see p. 606.

CURIOS

Visitors to India, like residents in the country, are often on the look-out for curios, which, though rarer than formerly, may still be acquired by searching in bazars, shops, and backshops. They should, of course, if possible obtain the advice and assistance of friends possessed of local experience. When thrown upon their own

resources, or dependent on Indian advisers, they will have to exercise all possible care and vigilance to avoid being cheated in making purchases, for the Indian dealers are skilled in imitating specimens and concealing blemishes. Many defects are liable to occur in Indian work, and there are many ways in which cheating can be effected. A study of the best Oriental work in European and Indian museums, observation of good specimens, and a perusal of illustrated works on Indian art, will help a purchaser to some extent; but, even when armed with such knowledge as he can gather, he must never forget the maxim *caveat emptor*. If resort is had to bargaining, the dealer will always reserve to himself a margin of profit in the bargain offered.

IRRIGATION

The history of irrigation in India stretches back into remote antiquity, many of the modern works being founded upon old native works which have been restored and extended. The storage of water in tanks is very common in Southern India. The works are for the most part of native origin, but much has been done by the British in repairing old tanks and constructing new ones in Madras, the Bombay Deccan, and Ajmer. In many places the Indians have made artificial lakes with dams, which are often of great architectural beauty. In the more level tracts of the South every declivity is dammed up to gather the rain. Innumerable wells cover the whole country; and it is very usual for the upland cultivator to make his own tiny irrigating stream, carrying it along the brows of mountains, round steep declivities, and across yawning gulfs and deep valleys, his primitive aqueducts being formed of stones and clay, the scooped-out trunks of palm-trees, and hollow bamboos. To lift the water a bucket-wheel, worked by men and oxen or buffaloes, is employed where the water is more than 40 ft. below the surface, and the Persian wheel, with a line of earthenware vessels on the ropes which run over it, where the water is nearer the surface in N. India. A good part of the Panjab and the whole of Sind would be scarcely habitable without irrigation; and it is practically indispensable also in the South-east of the Madras Presidency.

The greatest British engineering works in India have been in canal irrigation, the water being drawn directly "from the larger rivers, which, drawing their water from lofty mountain ranges, can, even in times of drought, be depended upon for an unfailing supply"; the water is conducted into either a "perennial," or an intermittent—*i.e.* an "inundation"—canal. A perennial canal is furnished with permanent headworks and weirs, and is capable of irrigating large

tracts throughout the year independently of rainfall. Irrigation works are divided into major and minor works. The major are subdivided into (a) productive public works, the capital of which is usually provided from borrowed money; (b) protective works, designed as a protection against famine, the capital of which is provided from current revenues. The sixty-five Productive Irrigation and Navigation Canals working at the end of 1915-16 had a mileage of 11,725 m., main canals and branches, and 32,519 m. of distributaries: of which 4232 and 19,338 respectively, were in the United Provinces and Panjab. "The area irrigated in 1915-16 by all classes of irrigation works for which capital and revenue accounts are kept was 17,340,633 acres, but the total area irrigated by all Government irrigation works was, approximately, 25,250,000 acres. The capital outlay (direct and indirect) to the end of the year was £37,472,116 on productive major works, £6,091,150 on protective major works, and £2,851,300 on minor irrigation works, for which both capital and revenue accounts are kept. The net receipts on capital outlay for these three classes were 8.07, 0.49, and 7.58 per cent. respectively" (*Moral and Material Progress Report*, 1915-16). In the Panjab 8,884,811 acres were irrigated: the net revenue from major works was £1,577,219, representing a return of 10.9 per cent. on a capital outlay of nearly £14,500,000. The main canals and branches in 1915-16 were 2774 m., and the distributaries 11,041 m. The Canal Colonies in the Panjab support a large population settled on Government waste land in the Doabs (between rivers), adding enormously to the cereal production, wealth and strength of the country. In the United Provinces of Agra and Oudh nearly 3,000,000 acres were irrigated, and the net revenue gave a return of 8.28 per cent. on a capital outlay of about £6,500,000. In Madras, 3840 m. of main canals and 8273 m. of distributaries irrigated 2,151,403 acres, showing a return of 9.9 per cent. on a capital outlay of nearly £5,750,000. The Sind Canals, 2071 m., gave 7.29 per cent., and irrigated 1,277,488 acres. Some of the oldest canals continue to be the most profitable. For instance, the Godavari Delta System (dating from 1846-7) gave 22.15 per cent. on the capital outlay; the Kistna Delta System (from 1855-6) gave 16.76 per cent.; the Ganges Canal (p. 372) 567 m. (from 1854) returned 9.79 per cent., while the Eastern Jumna Canal, 129 m. (from 1830), yielded 24.57 per cent. on capital outlays. "There are great differences in the financial success of the irrigation works in the various provinces. These are due to physical conditions, such as surface, soil, climate, and the absence or presence of large rivers with a permanent supply of water, as well as to differences in the character and habits of the people. There are also considerable differences in the manner in which the

irrigation revenue is assessed and collected, which have an important bearing on the financial success of the works." (*Same Report*).

Minor works are constructed from current revenues, and consist of irrigation systems which are not important enough to treat as major works. Some are old native works restored, some works of the British Government, some are village works which the State has taken under control, owing to disputes, or for maintenance.

In 1915-16 the forty-nine *Protective* works showed 878 m. of main canals and branches, and 2281 m. of distributaries, in operation, irrigating 386,261 acres; but yielding, from their character, less than $\frac{1}{2}$ per cent. on a capital outlay of over £6,000,000.

In years of scanty rainfall the area irrigated by Government works is enormously increased; but in years of almost complete drought the supply of water in the rivers has been known to fall short of the great demands on it, owing to failure of rains in the mountains.

Besides the area irrigated by Government works, it is calculated that something like 18,000,000 acres are irrigated by means of tanks wells, lakes, and the smaller canal channels. This area is likely to be largely increased in the near future. In the Madras Presidency alone there are some 60,000 tanks, the Indian Irrigation Commission, which presented a report in April 1903 on the subject, having recommended that forty-four crores of rupees should be spent on irrigation during the next twenty years, largely on works indirectly reproductive and on private irrigation works.

"In addition to the works in operation, there are forty-two major projects, twenty being productive and twenty-two protective, which are either under construction, awaiting sanction, or being examined by the professional advisers to Government. They are estimated to extend the benefits of irrigation to an area of over 9,500,000 acres, out of a culturable commanded area of 22,500,000 acres, at a cost of £35,000,000" (*Government of India Financial Statement for 1917-18*).

FAMINE

The importance of irrigation will be fully realised from the figures of the last three famines from which the country has suffered.

In the first of these, in 1896-7, the areas affected were 194,000 sq. m. in British India and 82,000 sq. m. in the Native States, the population of the two areas being 45,000,000 and 7,000,000, of whom 4,250,000 were on State relief works in June 1896. The second famine, in 1899-1900, extended to 175,000 sq. m. (population 25,000,000) and 300,000 sq. m. (population 30,000,000) in British India and

Native States, and no less than 6,500,000 people were in receipt of relief in August 1900. The third, of 1907-8, affected an area of 66,000 sq. m. and a population of 30,000,000. The recurrence of famine is accepted as a normal feature in the administration of India, and due provision is made beforehand for providing relief whenever that may be required in consequence of the failure of the periodical rains on which the crops depend. Famines occurred in India long before the British entered the country, and contemporary writings show that the mortality was terrible, even to so late as 1769-70, when one-third of the people of Bengal died, it is said. After the famine of 1876-8 (chiefly in Madras and Bombay) the Famine Commission of 1880 was appointed, and there have been other Commissions in 1898 and 1901. The whole subject of famine-relief administration has been thoroughly investigated, elaborate codes of instructions have been prepared for each Province, the symptoms of impending scarcity are carefully watched, the means of communication have been greatly improved, so that trade and the supply of food to meet demand have been enormously facilitated, with the result that food is now always made available in any famine-stricken tract: relief works are provided, on which famined labourers can earn a subsistence wage, and gratuitous relief is given to all incapable of working. Famine mortality is, therefore, checked so far as human efforts can arrest it; but much sickness and disease may often occur in times of scarcity. There is not, and never has been, a separate "famine insurance fund," as has often been supposed, but in the Annual Budget a certain sum is set aside—now a million sterling—to be devoted yearly to the protection of those areas which are most liable to these visitations by the construction of irrigation works and railways and the adoption of other measures. By the canals and other irrigation works the crops are annually secured over large tracts of country.

THE MATERIAL CONDITION OF THE PEOPLE OF INDIA

It is impossible to enter in detail upon so wide a subject as this. Full information will be found at pp. 325-355 of the *Decennial Material Progress Report* for 1892-1902, at pp. 376-423 of the similar *Report* for the ten years ending with 1911-12, and in subsequent Annual Reports; and a perusal of the facts there recorded will probably convince any open-minded person that the material condition of the people in India has greatly improved in the past, and is still improving, putting altogether aside the advantages of peace and order which now prevail in the country. Various statistics indicate a greater spending capacity of the people. At the same time, the

enormous growth of the population is a matter of serious import. In the decade 1901 to 1911 it increased by 20,750,000, or 7.1 per cent. The people have been greatly benefited by the large reductions in the Salt Duty (a source of revenue in India from time immemorial). The rate of duty was Rs.2½ per maund until March 1903, when it was reduced to Rs.2. It was further reduced to R.1½ in 1905, in March 1907 to R.1, and since 1st March 1916, R.1¼ per maund. In Burma the rate has been R.1 per maund throughout. The increase in consumption rose from 366 to 482 lakhs of maunds, or 31 per cent., in the ten years 1901-02 to 1911-12. The average consumption per head varies from about 9 lbs. in the Panjab, United Provinces, Rajputana, and Central India to over 13 in Bengal, the Central Provinces, Bombay and Berar, over 10 in Sind, 19 in Madras. Though called a Salt Tax, the burden on salt is really its selling price fixed by Government, all sources of supply, apart from the salt imported by sea, being the property of Government, and worked by the State. The principal natural sources are the Jhelam mines (p. 299) and the Sambhar Lake (p. 188). Details of the cotton duties levied in India and the countervailing duties imposed on imported sugar will be found on p. 217 of the above Report for 1911-12. The receipts from the Customs Import Duty on Cotton Manufactures increased in the nine years, 1902-03 to 1911-12, from £634,200 to £1,029,900, and the Excise Duty on them during the same period from £121,700 to £320,300.

A general view of the condition of the people for the whole of India is hardly possible: it can best be considered by the Provinces separately. The main factor is the annual harvest, ranging from a full crop to a failure. In Bengal the condition of agriculturists has improved considerably. Their increased demand for petty luxuries shows a rising standard of living among the labouring classes. The agricultural population are beginning to clear themselves of debt. In the United Provinces there is a marked improvement in general prosperity, with falling prices and rising wages. There has been an unquestionable advance of late years in the Panjab in the standard of comfort and in the intelligence and enterprise of the agricultural classes. Food, clothing, houses, utensils—all show improvement. The prosperity of the irrigation colonies appears from their financial transactions. In the Central Provinces and Berar low prices and keen demand for labour connote prosperity. The Burmese population in general is increasing in prosperity, comfort, and intelligence. Much Indian loanable capital has been withdrawn from agriculture in recent years for investment in oil and other industrial companies. In Eastern Bengal and Assam the prices of produce rose, while those of the chief food stuffs fell. In Madras prices continue high, and

wages are rising. The small cultivators who work on their own land are doing well. In Bombay and Sind successive good harvests have promoted an increase of prosperity in all directions.

PLAGUE

Plague in India made its recent epidemic appearance at Bombay in August 1896, but it was often widespread during the six centuries of Muhammadan rule. The total number of deaths caused by it in the last twenty years has been nearly 9,000,000, of which over 2,000,000 have taken place in the Panjab. The remarkable variation in the annual mortality is apparent from the figures given here.

1896-7	57,543	1907	1,315,892
1898	116,285	1908	156,480
1899	139,009	1909	178,808
1900	92,807	1910	512,605
1901	282,027	1911	846,873
1902	576,365	1912	306,488
1903	883,076	1913	217,869
1904	1,143,993	1914	295,760
1905	1,069,140	1915	433,866
1906	356,721		

Plague is local in its visitations. Many parts of India have been almost entirely free from its ravages. In some parts of the Panjab and the United Provinces the mortality has been so severe as to disorganise the labour market and to affect the level of wages. The mortality in Eastern Bengal and Assam was at no time appreciable—largely, it is believed, because the habits of the people and the structure of their houses are unfavourable to the breeding of rats, while in the Madras Presidency and in Burma the epidemic has never reached serious dimensions. The Government have not relaxed their efforts to discover and apply the most effective remedies. The Plague Commission in India have continued their investigations. It is now generally agreed (1) that epidemic bubonic plague in man is directly dependent on epidemic plague in rats; (2) that the vehicle of contagion between rat and rat and between rat and man is the plague-infested rat-flea; (3) that bubonic plague is not directly infectious from man to man; and (4) that the life of the plague bacillus outside the bodies of men, animals, or fleas is of short duration. It is now possible to deal satisfactorily with the disease when effective control can be established over the sanitary conditions; in the case of the native army, and in limited areas such as jails, there has been remarkable success. But attempts to establish such control over large areas would involve too great

an interference with the habits, prejudices, and sentiments of the people, and the application of measures of proved utility must depend upon the particular circumstances of each locality and upon the character of its inhabitants. In the face of great practical obstacles three principal measures for combating plague are now adopted—" (1) the temporary evacuation of quarters in which plague is prevalent ; (2) inoculation with the prophylactic fluid ; (3) the systematic destruction of rats, the diminution of the food supply to which they have access, and, in the course of time, such improvement in the structure of houses as shall render them reasonably rat-proof" (*Moral and Material Progress Report*, 1910-11).

It is not easy to realise the effects of such a loss as the numbers indicate. But beyond a possible examination at certain railway stations, travellers are not likely to see anything connected with plague.

SANITATION

Sanitation—the care for the health of the population—is as important as any branch of Indian administration, and perhaps more difficult to cope with than any other, owing to the indifference, even the dislike, of the people in general. The whole subject, in various forms, is perpetually receiving the attention of the Government and the officers, civil and medical. It is largely a question of money, as there is any amount to be done if funds can be provided ; the actual works to be undertaken, of course, require consideration and selection in order to produce the greatest benefits for the money available. Practical sanitation differs in urban and rural areas. In the largest towns great systems of filtered water-supply, sewerage, drainage, and conservancy have been introduced, and are constantly being extended and improved ; in some important municipalities pure water-supply, sewerage, and drainage schemes are in working order, and conservancy, of course, in all municipalities. In villages tanks are generally set apart and protected for drinking-water ; septic tanks are sometimes utilised, and bazars are improved ; in rural areas drainage and conservancy are too often neglected or minimised. Schemes are sometimes undertaken for the reclamation of insanitary areas in towns and municipalities. Outbreaks of particular epidemics are met by special measures. Hospitals, dispensaries, and asylums are maintained in most places under Government or municipal management. There are Central and Provincial Sanitary Commissioners and Departments, and Sanitary Boards with staffs of medical officers, inspectors, sanitary engineers, whose duty it is to prescribe sanitary measures so far as possible, observe the

occurrences and facts of any diseases, and propose remedies. There are three main classes of fatal disease—specific fevers, diseases affecting the abdominal organs, and lung diseases. Much of the sickness and mortality is due to deficient powers of resistance and to insanitary habits and surroundings. Fever is generally understood to mean malarial fever, but many causes of death and many diseases much more fatal than malarial fever are included under the common heading under which more than half the deaths are recorded. Cholera is never absent, but is greatly reduced everywhere by proper precautions in respect of the water and milk supplies. Much attention is being paid to the subject of malaria and its connection with the breeding of certain mosquitoes in stagnant water; active campaigns are sometimes undertaken for the distribution of quinine and the extermination of mosquitoes by drainage, petrolage, etc., but much remains to be done. The health of the armies, both European and Indian, has been greatly improved of late years, as experience has been gained; and the same may be said of the jail population. The registration of births and deaths cannot be accepted as altogether complete or accurate; so far as they were recorded in 1910 they showed a general birth-rate of 39.52 per 1000 against a death-rate of 33.20; and during the previous five years a mean birth-rate of 37.61 and a mean death-rate of 35.40 per 1000. Laboratories and Institutes have been established for research, special enquiries have been undertaken, and scientific publications issued for the purpose of improving the public health by combating disease in every form; but climatic conditions, the habits of the people, and the insufficiency of money, are permanent obstacles to the attainment of anything like complete success.

THE COUNTESS OF DUFFERIN'S FUND

The Countess of Dufferin's Fund, or National Association for providing Female Medical Aid for the Women of India, was established in 1885 by the Countess of Dufferin.

The Central Committee of the Fund is presided over by the Viceroy's wife as Lady President, and has its headquarters in Delhi and Simla. The Secretaries are always glad to receive visitors and to give help and information to those who wish to visit hospitals and inform themselves on the subject of medical aid for Indian women. In each presidency or province there is a Presidency or Provincial Committee, of which the Governor's or Lieut-Governor's wife is Lady President, and which works in co-operation with the Central Committee.

A number of Local Committees affiliated to the Provincial Committees are scattered through the country, and many of these have founded and are carrying on, with assistance from local bodies, zenana hospitals officered by women, where *parda* ladies attend for treatment, and where special attention is paid to midwifery and diseases of women and children. These hospitals are all interesting, and some in the larger cities are excellent and up-to-date institutions, although still retaining special Indian characteristics. They are always open to inspection (with due regard to *parda*), and visits to those in Bombay, Calcutta, Madras, Delhi, Lahore and Karachi would well repay visitors who are interested in Indian women and the many problems concerning them.

The income from investments of the Central Committee in 1913 was about Rs.35,000. Since 1914 an annual grant of Rs.150,000 has been received from the Government of India for carrying on the "Women's Medical Service,"—a Service for women doctors on the lines of the Indian Medical Service, and which secures for its members adequate pay, leave rules and arrangement for Provident Fund. The prospects of women doctors in India have been much improved thereby, and most of the principal women's hospitals are under members of this Service. In 1902 a sum of nearly 7 lakhs was collected by the late Lady Curzon for the establishment of the Victoria Memorial Scholarships Fund for the training of Indian midwives. Many midwives are being trained under the auspices of this fund in different parts of the country.

In 1916 the Central Committee appointed a medical lady, Dr M. I. Balfour, W.M.S., to act as Joint-Secretary of the Fund in conjunction with the Honorary Secretary, Lt.-Colonel H. Austen Smith, I.M.S., Surgeon to the Viceroy.

One of the most interesting developments of recent years as regards medical aid for women is the establishment of a Medical College for Indian women at Delhi, five of the professorial staff being provided from the ranks of the Women's Medical Service. (*See Lady Hardinge College.*)

The Annual Report of the Central Committee can be obtained by application to the Honorary Secretary, Countess of Dufferin's Fund, Viceroy's Camp, India.

LADY HARDINGE MEDICAL COLLEGE FOR WOMEN.

The Lady Hardinge College was initiated by the late Lady Hardinge, who recognised the great need for the training of Indian women in medicine, and the difficulties in the way of those who study in male colleges. By her efforts a sum of about 25 lakhs was collected,

many generous donations being given by Indian Princes. A site in new Delhi was presented by the Government of India, and the foundation stone was laid on 17th March 1914 by Lady Hardinge herself. The College was opened in February 1916 by the late Viceroy, Lord Hardinge. Thirty-four students came into residence in October of the same year. The Principal is Miss K. A. Platt, M.D., London, who will be assisted, when the faculties are in full working order, by a staff of seven women professors, all highly qualified in medicine or science. The Government of India contributes 1 lakh annually to the maintenance of the College. The remainder of the upkeep is met by students' fees and endowments.

The College is a fine building facing one of the main thoroughfares of New Delhi, and contains excellent class-room and laboratory accommodation. Behind it are hostels for European, Hindu, Muhammadan, Parsi and Sikh students. The Lady Hardinge Hospital adjoining provides clinical material for the students who are being prepared for the M.B., B.S. degrees of the Panjab University. This Hospital was opened on 17th March 1917 by Her Excellency Lady Chelmsford, C.I., at an interesting *parda* ceremony.

The grounds, 50 acres in extent, contain a fine recreation hall and students' playing-fields, also professors' bungalows and a nurses' hostel.

The College is situated about 3 m. from the Delhi Railway Station. It is an institution unique of its kind and well worthy of a visit from those who are interested in Indian women and the problems which affect them.

THE INDIAN ADMINISTRATION

The supreme authority in India, subject to the Secretary of State, is vested in the Viceroy and Governor-General, at present the Right Hon. Frederick John Napier, Baron Chelmsford, and his Council of six ordinary Members, and one extraordinary Member—viz., the Commander-in-Chief—who form "The Government of India." These seven Members are in charge of the Home, Revenue, Public Works and Irrigation, Finance, Commerce, Education, Legislative, and Military Departments, at the heads of which, and of the Foreign and Political Departments, is a Secretary to the Government of India.

Under the Home Department are included the subjects of the Civil Service, Justice, Police, Prisons, Lunatic Asylums, and the like; under the Education Department are Education, Local Government, Sanitation; under Revenue and Agriculture are Land Revenue, Surveys, Forests, Agricultural Development, Famine, Meteorology;

under the Commerce and Industry Department are Trade and Shipping, Customs, Excise, Salt, Ports, Post Office, Telegraph, Mines, Factories, Statistics; under Finance are Taxation, Currency, Mints, Banking, Opium. The distribution of Government business is liable to alteration from time to time.

The Legislative Council of the Governor-General includes the Members of the Executive Council (from which it is entirely distinct) and a number of additional members, official and non-official, the latter for the most part selected.

The great experiment made by the Indian Councils Act, 1909 (9 Edw. 7 Ch. 4), of largely increasing the number of elected members of the Legislative Councils, and of appointing Indian members to Executive Councils, has admitted a large number of natives of India to a considerable share in the legislative and executive work of the country. The Legislative Council of the Governor-General has 68 members, of whom 36 are officials and 32 non-officials; an official majority has been maintained by these numbers. But in all the Provincial Legislative Councils (which number variously from 17 members in Burma to 53 in Bengal) there is a non-official majority.

The army is under the control of the Commander-in-Chief, at present General Sir Charles C. Monro, G.C.M.G., K.C.B., and under the direct orders of two Lieutenant-Generals, commanding the Southern and Northern Armies, with Headquarters at Ootacamund and Meerut. Under them the army is distributed into ten Divisions, including Burma. In addition to the usual headquarters staff of the army there are Inspector-Generals of cavalry and artillery.

At the head of each Province is a Governor, Lieutenant-Governor, or Chief Commissioner. The Governors of Bombay, Madras, and Bengal, and the Lieutenant-Governor of Bihar and Orissa, have in each case an Executive Council of three members (two members of the Civil Service and one Indian), and in each of these Governments, the United Provinces of Agra and Oudh, the Panjab, Burma, Assam, and the Central Provinces, is a Provincial Legislative Council. In every Province the administration is, generally speaking, divided into two branches—the Judicial and the Executive. At the head of the former is a High Court, Chief Court, or Judicial Commissioner, and at the head of the latter usually a Board of Revenue or a Financial Commissioner. This link in the revenue administration is, however, missing in Bombay, as the link of Commissioners is lacking in Madras. Next in the official scale come the Commissioners of Divisions, exercising control over a number of districts which constitute the administrative units of the country. At the head of each district is a Collector or Deputy-Commissioner, who is also District Magistrate, and is responsible for the administration of Criminal

Justice, Police, Revenue, and all executive work in his jurisdiction. He is assisted by a number of English and Indian Magistrates and Officers at the headquarters of each district,—in some cases by officers in charge of sub-divisions of the district,—and in all cases by Indian Magistrates and Sub-Collectors in charge of portions of the districts, known variously as sub-divisions, tahsils, talukas, and the like. Much of the petty magisterial work of the country is done by Honorary Magistrates appointed by Government; while the management of the local concerns of Municipalities and District Boards is mainly in the hands of members of the Indian community, selected or elected. At the Headquarters of the Provincial Governments are the Secretaries to the Government, the Inspector-Generals, and other heads of the various Departments of Public Works, Police, Education, Forests, Registration, Medical Relief, and Sanitation, while under the Financial Commissioner or the Board of Revenue are usually (1) a Director of Land Records, responsible for the maintenance of the revenue records of the Province, and in the first instance for the settlements of Land Revenue, and (2) a Commissioner of Excise. The appointments are not exactly alike in all Provinces.

AREA AND POPULATION OF BRITISH INDIA AND NATIVE STATES (CENSUS OF 10TH MARCH 1911).

PROVINCE, STATE, OR AGENCY.	Area in Square Miles.	Towns.	Villages.	Persons.			Population, Census 1901.	Difference per cent. 1901 and 1911.
				Males.	Females.	Total.		
PROVINCES.								
1. Ajmer (Merwara)	2,711	5	748	260,198	235,197	501,395	476,912	+5.1
2. Andamans and Nicobars	3,143	—	224	19,570	6,880	26,450	24,648	+7.3
3. Assam	58,015	20	27,875	3,407,621	3,246,014	6,713,635	5,841,878	+14.9
4. Baluchistan (Districts and Administered Territories)	54,228	6	1,564	230,181	175,231	414,412	382,106	+8.5
5. Bengal	78,669	119	110,732	28,865,225	22,117,852	46,483,077	42,141,477	+7.9
6. Bihar and Orissa *	83,181	70	87,675	16,850,029	17,630,755	34,480,784	33,242,783	+3.8
7. Bombay (including Aden)	123,050	200	26,056	10,245,847	9,426,795	19,672,642	18,569,650	+6.0
8. Burma	280,839	63	37,678	6,183,494	6,381,723	12,515,217	10,490,624	+15.6
9. Central Provinces and Berar †	99,823	112	39,005	6,030,392	6,985,916	13,016,308	11,971,452	+16.3
10. Coorg	1,582	2	413	97,279	77,697	174,976	180,607	-8.1
11. Madras	142,330	279	53,835	20,382,055	21,022,449	41,405,404	38,229,654	+8.3
12. North-West Frontier Province (Districts and Administered Territories) †	13,418	19	3,083	1,182,102	1,014,831	2,196,933	2,041,534	+7.6
13. Panjab	99,779	139	33,421	10,992,007	8,982,889	19,974,896	20,380,337	-1.7
14. United Provinces of Agra and Oudh	107,267	418	106,023	24,641,831	22,540,213	47,182,044	47,692,277	-1.1
Total, British Territory	1,093,074	1,452	537,357	124,873,691	119,398,851	244,267,542	231,605,940	+5.5

The figures refer throughout to the whole area of each Province and State, with small exceptions—viz., (1) the French and Portuguese possessions; (2) the external States of Afghanistan, Buitan, and Nepal; (3) certain tribes on the borders of Assam and Burma; (4) certain tribal areas in political relation with Aden; (5) East Manglung and an unadministered area in North Arakan (both in Burma).

* The figures for Bengal, Bihar and Orissa, refer to the Provinces as constituted with effect from 1st April 1912, in accordance with the Proclamation issued by His Majesty the King-Emperor at Delhi on 12th December 1911.

† Berar was amalgamated for administrative purposes with the Central Provinces from 1908.

‡ The North-West Frontier Province was formed in 1901 out of certain Panjab Districts and certain areas not previously administered.

AREA AND POPULATION OF BRITISH INDIA AND NATIVE STATES (CENSUS OF 10TH MARCH, 1911).

PROVINCE, STATE, OR AGENCY.	Area in Square Miles.	Towns.	Villages.	Persons.		Total.	Population Census 1901.	Difference per cent. 1901 and 1911.
				Males.	Females.			
STATES AND AGENCIES.								
15. Assam State (Manipur)	8,456	1	1,477	170,666	175,556	346,222	284,465	+21.7
16. Baluchistan States	80,410	3	2,120	227,238	193,053	420,291	438,640	-4.0
17. Baroda State	8,182	41	3,054	1,055,935	976,803	2,032,738	1,962,092	+4.1
18. Bengal States	5,393	5	3,513	438,368	384,197	822,565	740,299	+10.7
19. Bihar and Orissa States	28,648	6	20,274	1,955,125	1,990,084	3,945,209	3,914,474	+0.8
20. Bombay States	63,864	132	14,619	3,765,401	3,646,274	7,411,675	6,908,569	+6.3
21. Central India Agency	77,367	77	33,023	4,801,459	4,555,521	9,356,980	8,497,895	+10.1
22. Central Provinces States	31,174	5	8,663	1,053,030	1,063,372	2,117,002	1,631,140	+29.8
23. Hyderabad State	82,668	85	20,151	6,797,118	6,577,558	13,374,676	11,141,142	+20.0
24. Kashmir State	84,432	61	8,865	1,674,367	1,433,759	3,108,126	2,905,578	+6.7
25. Madras States *	10,649	21	4,736	2,411,758	2,400,083	4,811,841	4,138,086	+14.9
26. Mysore State	29,475	91	16,740	2,031,321	2,871,572	5,803,193	5,530,399	+4.8
27. North-West Frontier Province (Agencies and Tribal Areas)	25,500	—	—	864,876	757,218	1,622,094	83,062†	—
28. Panjab States	36,551	35	10,979	2,322,908	1,889,886	4,212,794	4,424,308	-4.8
29. Rajputana Agency	128,987	133	32,271	5,515,275	5,015,187	10,530,462	9,853,366	+6.9
30. Sikkim State	2,818	—	315	45,059	42,801	87,860	83,071	+5.9
31. United Provinces States	5,079	5	2,185	431,440	400,506	832,066	802,067	+3.7
Total, States and Agencies	709,583	701	182,985	36,465,244	34,423,610	70,888,854	62,755,116	+13.0
British Territory	1,093,074	1,452	537,567	124,573,691	119,393,851	243,967,542	231,605,940	+5.5
Total, India	1,802,657	2,153	720,542	161,338,935	153,817,461	315,156,396	294,361,056	+7.1

* Including Travancore and Cochin.

† The figures for 1901 refer only to British posts in the tribal areas.

DISTRIBUTION OF POPULATION ACCORDING TO RELIGION (CENSUS OF 10TH MARCH 1911).

Administrations.	Hindus.*	Sikhs.	Jains	Buddhists.	Parsis.	Muham- madans.	Chris- tians.	Jews.	Animistic.	Minor Religions and Religions not returned.	Total.
PROVINCES.											
1. Ajmer (Merwara)	339,436	922	20,302	—	302	81,035	5,432	27	3,979	—	501,395
2. Andamans and Nicobars	9,527	455	—	1,597	—	4,580	595	2	9,711	21	26,459
3. Assam	3,637,828	750	2,398	10,506	5	1,886,328	68,430	1	1,109,187	2	6,713,685
4. Baluchistan	96,438	5,290	10	14	166	377,356	6,030	57	—	1	414,412
5. Bengal	20,330,730	2,217	6,206	240,854	610	23,989,719	120,518	1,908	780,182	1,058	45,483,077
6. Bihar and Orissa	28,365,235	2,177	4,440	496	35	3,666,561	328,835	25	2,920,526	1,464	34,490,084
7. Bombay (including Aden)	14,922,365	11,887	212,309	691	80,980	4,024,435	333,240	15,081	170,355	643	19,672,042
8. Burma	339,679	6,693	70,238	10,384,579	800	420,777	210,081	1,024	701,473	116	12,115,217
9. Central Provinces and Berar	11,437,460	2,201	70,238	—	1,728	564,909	34,697	125	1,744,321	—	13,910,305
10. Coorg.	138,922	—	97	—	34	13,143	3,553	—	19,237	—	13,174,976
11. Madras	36,806,978	7	23,995	—	488	2,740,408	1,191,266	71	638,463	35	41,405,404
12. North-West Frontier Province (Districts and Administered Territories)	119,942	30,345	4	—	40	2,089,994	6,585	14	—	—	2,196,833
13. Punjab	6,682,818	2,093,804	39,637	4,190	626	10,955,721	198,106	54	—	—	19,974,696
14. United Provinces of Agra and Oudh	40,253,433	15,160	75,427	780	872	6,658,378	177,949	50	—	—	47,182,044
Total, British Territory	163,621,431	2,171,908	458,578	10,644,409	86,155	57,423,889	2,492,284	18,524	7,348,024	2,340	244,267,542

* These figures include 234,841 Aryas and 5210 Brahmins.

DISTRIBUTION OF POPULATION ACCORDING TO RELIGION (CENSUS OF 10TH MARCH 1911).

Administrations.	Hindus.*	Sikhs.	Jains.	Bud- dhists.	Parsis.	Muham- madans.	Chris- tians.	Jews.	Animistic.	Minor Religions and Religions not returned.	Total.
STATES AND AGENCIES.											
15. Assam State (Manipur)	291,939	7	110	7	—	14,504	182	—	130,008	—	346,332
16. Baluchistan States	11,838	3,100	—	2	4	405,232	55	—	—	—	430,201
17. Baroda State	1,697,739	90	43,462	—	7,365	160,887	7,203	40	115,411	—	2,092,708
18. Bengal States	6,077,657	4	376	6,012	1	241,309	228	—	—	—	822,565
19. Bihar and Orissa States	3,383,453	51	189	1,431	—	16,577	38,440	—	499,762	—	3,945,208
20. Bombay States	6,065,051	1,191	277,643	—	2,585	877,431	12,411	1,028	149,879	806	7,441,673
21. Central India Agency	8,202,736	1,834	87,471	—	1,830	511,200	9,368	57	483,894	—	9,308,980
22. Central Provinces States	1,811,420	136	1,159	—	29	20,120	38,704	—	745,484	—	2,117,002
23. Hyderabad State	11,626,355	4,720	21,026	—	1,629	1,380,990	54,206	12	235,722	—	13,374,676
24. Kashmir State	660,890	81,658	345	36,512	31	2,398,320	975	—	19,063	—	3,158,126
25. Madras States	3,921,757	—	150	20	6	314,498	1,154,209	1,248	72,196	—	4,811,811
26. Mysore State	5,840,873	293	17,630	622	101	314,494	59,844	40	—	—	5,806,153
27. North-West Frontier Province (Agencies and Tribal Areas)	2,686	1,114	—	—	—	9,005	183	—	—	—	13,538
28. Panjab States	2,090,803	789,925	7,138	3,500	27	1,319,766	1,645	—	—	—	4,212,704
29. Rajputana Agency	8,753,019	8,968	332,397	2	342	985,825	4,256	31	444,702	—	10,530,462
30. Sikkim State	58,675	—	—	28,915	1	44	285	—	—	—	87,920
31. United Provinces States	583,599	26	308	—	—	246,358	1,745	—	—	—	832,036
Total, States and Agencies	53,965,461	842,558	789,604	77,044	13,941	9,228,410	1,383,919	2,456	2,947,144	34,701	69,280,298
British Territory	163,621,431	2,171,908	458,578	10,644,409	86,155	57,423,889	2,492,284	16,824	7,348,024	2,940	244,907,542
India, Total	217,586,892	3,014,466	1,248,182	10,721,453	100,096	66,947,299	3,876,203	20,980	10,295,168	37,101	313,547,840

The total population, according to their distribution by religion (313,547,840), is less than the total population of India (315,156,306), owing to the omission of 1,608,556 persons in the North-West Frontier Province who were not enumerated by religion.

* These figures include 8004 Aryas and 294 Brahmins.

CHRISTIAN POPULATION.

DISTRIBUTION ACCORDING TO RACE AND DENOMINATION.

RACE.	Abyssinian.	Anglican Communion.	Armenian.	Baptist.	Congregationalist.	Greek.	Lutheran.	Methodist.	Minor Protestant Denominations.
1. Europeans and Allied Races	..	125,891	1,135	2,816	736	522	1,469	6,904	581
2. Eurasians (Anglo-Indians)	..	34,553	30	2,239	989	17	189	2,578	186
3. Natives (Indians)	25	832,872	33	331,539	134,240	1,130	216,842	162,277	11,681
Total	25	492,316	1,198	336,594	135,265	1,669	218,500	171,754	12,448
	Presbyterian.	Protestant—sect not specified.	Quaker.	Roman Catholic.	Salvationist.	Syrian.	Sect not returned.	Indefinite Beliefs.	Total.
1. Europeans and Allied Races	15,151	2,897	45	40,120	189	7	1,233	580	199,776
2. Eurasians (Anglo-Indians)	1,911	1,699	6	57,024	19	6	1,572	44	101,657
3. Natives (Indians)	164,069	27,684	1,194	1,393,720	92,199	728,291	15,853	1,621	3,574,770
Total	181,131	32,180	1,245	1,490,864	92,407	728,904	18,058	2,245	3,876,203

CHRISTIAN POPULATION.

TERRITORIAL DISTRIBUTION ACCORDING TO RACE.

BRITISH TERRITORIES.

BRITISH TERRITORIES.								
RACE.	Ajmer Merwara.	Andamans and Nicobars.	Assam.	Baluchistan.	Bengal.	Bihar and Orissa.	Bombay.	Burma.
1. Europeans and Allied Races .	1,755	251	2,330	4,190	25,429	6,249	32,340	13,433
2. Eurasians (Anglo-Indians) . .	710	78	437	118	21,068	3,341	8,933	11,106
3. Natives (Indians)	2,967	237	63,763	722	83,081	230,235	191,973	185,542
Total, British Territory	5,432	566	66,480	5,030	129,518	239,825	233,246	210,081
	Central Pro- vinces and Berar.	Coorg.	Madras.	N. W. F. Pro- vince Districts, and Administered Territories.	Panjab.	United Pro- vinces—Agra and Oudh.	Total.	
1. Europeans and Allied Races .	7,248	297	14,884	5,624	31,680	33,388	178,908	
2. Eurasians (Anglo-Indians) . .	3,543	138	26,003	99	3,206	8,092	58,612	
3. Natives (Indians)	24,106	3,208	1,150,379	862	163,220	136,469	2,246,764	
Total, British Territory	34,697	3,553	1,191,266	6,585	198,106	177,949	2,492,284	

CHRISTIAN POPULATION.

TERRITORIAL DISTRIBUTION ACCORDING TO RACE.

STATES AND AGENCIES.

RACE.	Assam State (Manipur)	Baluchistan States.	Baroda State.	Bengal States.	Bihar and Orissa States.	Bombay States.	Central India Agency.	Central Provinces States.	Hyderabad State.
1. Europeans and Allied Races	20	20	159	22	67	387	4,582	85	5,384
2. Eurasians (Anglo-Indians)	43	5	82	27	64	242	565	145	3,004
3. Natives (Indians)	69	30	6,962	179	38,909	11,782	4,211	38,474	46,908
Total, States and Agencies	132	55	7,203	228	38,440	12,411	9,358	38,704	54,296
	Kashmir State.	Madras State.	Mysore State	N.W. Frontier Province—Agencies and Tribal Areas.	Panjab States.	Rajputana Agency.	Sikhim State.	United Provinces States.	Total.
1. Europeans and Allied Races	250	498	7,463	117	598	1,179	14	23	20,868
2. Eurasians (Anglo-Indian)	16	4,216	5,827	1	273	529	4	2	15,045
3. Natives (Indians)	709	1,149,495	46,554	15	774	2,548	267	1,720	1,348,006
Total, States and Agencies	975	1,154,209	59,844	133	1,045	4,256	285	1,745	1,383,919

INDIA.

RACE.	British Territories.	States and Agencies.	Total.
1. Europeans and Allied Races	178,908	20,868	199,776
2. Eurasians (Anglo-Indians)	86,612	15,045	101,657
3. Natives (Indians)	2,226,764	1,348,006	3,574,770
India, Total	2,492,284	1,383,919	3,876,203

POST OFFICE AND RAILWAYS

DETAILS OF THE WORKING OF CERTAIN IMPERIAL DEPARTMENTS

The following figures will give some idea of the enormous and increasing operations to which the Indian Administration extends. The Post Office and Telegraph Department now employs a staff of 106,502.

POST OFFICE

The number of Post Offices in India in 1915-16 was 19,328; of letter-boxes 49,684 (an increase of 380 in the year); of village postmen 8225; of total establishment 95,746. The length of railways and roads over which mails were conveyed was 157,657 m. The articles conveyed comprised—

By Letter Mail

Paid unregistered letters	493,217,757
Unpaid letters	25,702,585
Registered letters and packets (including insured and value-payable)	19,483,944
Post Cards	472,456,743
Registered newspapers	59,581,349
Ordinary unregistered packets	52,094,873

By Parcel Mail

Registered parcels	6,048,985
Unregistered parcels (including value-payable unregistered packets)	6,841,924

Total 1,051,428,160

(An increase of $8\frac{1}{2}$ millions of articles in the year.)

The inland and foreign money-orders during the year numbered 32,322,594 for the remission of over 39 million pounds, including 866,970 telegraphic orders for $3\frac{1}{2}$ million pounds. The total number of value-payable articles of all kinds sent through the post was 9,653,213, and the amount declared for recovery was nearly 13 crores of rupees—an increase of .21 and 3.06 per cent. respectively over the previous year. The amount deposited in the Post Office Savings Banks reached nearly $15\frac{1}{2}$ crores, or a little over 10 million pounds, and the number of depositors was 1,660,424.

TELEGRAPHS

The length of telegraph lines open in 1915-16 was 86,067 m. (wires and cable 337,720 m.). The number of offices open was 196 departmental, 3288 combined with the post—total 3484; and the

number of messages sent 18,129,748 (of which 1,465,580 were foreign messages), involving nearly 89 million signalling operations, of a value of Rs.13,668,000—*i.e.*, over £911,000. The total receipts exceeded the total charges of the year by 43½ lakhs.

The number of wireless stations in India and Burma at the end of 1915-16 was nineteen, including nine coast stations. The number of messages dealt with by the latter during the year was 83,719.

RAILWAYS

The number of miles of railway opened in 1915-16 was 606, bringing the total mileage open (31st March 1916) up to 35,833 m. (In 1891 there were 17,500 m., and in 1901 there were 25,500 m. open, so that more than 18,000 m. of railway have been opened in twenty-five years.) This mileage is considerably larger than that of France, nearly as large as that of Austro-Hungary, three times larger than that of Italy, and about 6000 m. less than that of the Germanic Empire. Of the total on 31st March 1916, 18,060 m. of railway were of the standard gauge (5½ ft.), 14,671 of the metre gauge (3 ft. 3⅞ in.), and 3102 of smaller (special) gauges. The railways are worked on different systems, varying in length from nearly 19,000 m. of State lines worked by Companies and over 7000 m. of State lines worked by the State to 73 m. in foreign territory. The total number of passengers carried in 1915-16 was 464,381,000, the increase of third-class passengers in the year being 10 millions.

At the close of 1915-16 the actual capital outlay from the commencement of operations on all open lines amounted to Rs.5,299,829,000,—*i.e.*, over £350,000,000, inclusive of miscellaneous items (English stores, etc.); the total outlay exceeded £350,000,000. The gross earnings of all Indian railways in 1915-16 amounted to nearly 6466 lakhs—an increase of 424 lakhs; while the net earnings gave an increase of 406 lakhs. The financial result to the State during 1915-16 of the working of the State railways, after meeting all charges (working expenses, interest, annuity payments, etc.), was a net gain of over 4 million pounds. The percentage of net earnings (3174 lakhs) on the total capital outlay was 5.99 in 1915-16. In that year 723 m. of line were sanctioned (*viz.*, 34 standard gauge, 499 metre, 190 special). At the end of 1915-16 there were 2374 m. under construction, or sanctioned for construction, including all the gauges.

During the year 1915-16 the total output of coal from the collieries in India and Burma amounted to nearly 17 million tons.

In the Railway Volunteer Corps there are, efficient, 584 officers

1740 non-commissioned officers, and 12,984 volunteers. The development of Indian railways during the last forty years has been phenomenal. The control of railways and railway schemes is now exercised by a Government Railway Board.

COMMERCE AND TRADE

The trade of India has reached enormous dimensions, the increase being specially noticeable during the last ten years. Five-and-thirty years ago the imports of merchandise averaged 33½ million pounds, and the exports nearly 53 million pounds; in 1915-16 they were, in spite of the War, in value, imports 87½ million pounds, and the exports 128½ million pounds. In 1913-14, *i.e.*, before the War, the imports of merchandise were 122 million pounds, the exports nearly 163 million pounds; so that in two years the total trade decreased from 285 million pounds to 216 million pounds—*i.e.*, by 69 million pounds, or 24 per cent. In 1915-16 trade adjusted itself successfully to War conditions.

The total sea-borne trade of British India in 1915-16 amounted to 238 million pounds, as against 236 million pounds in 1914-15, and 327 million pounds in 1913-14, when the highest figures were attained. These totals include merchandise and treasure, both on private and on Government account.

"The trading power of India depends primarily on the success of its crops," and these, of course, are affected by the climatic conditions of the year, which vary in different parts of the country. It has been calculated that the value of ten principal crops (not the whole agricultural produce) in 1911-12 amounted to Rs. 504½ crores—*i.e.*, 336½ million pounds. The exports and re-exports represent 58.2 of the grand total of trade. Of the total imports of 1915-16, 67.7 was with the British Empire (59.4 being with the United Kingdom); and of the total exports, 55.4 was with the British Empire (38 being with the United Kingdom). The exports exceeded the imports, including Government transactions, in 1915-16, by £38,825,000. Deducting all Government transactions, the balance in favour of India for 1915-16 was calculated at £21,615,000. In 1911-12 8868 steamers and sailing vessels entered and cleared at Indian ports, with a tonnage of nearly 16½ million tons; in 1915-16 the figures were 8634 steamers, etc., aggregating 12,152,302 tons. Figures of the trade, imports and exports, of articles of all kinds are available, though they cannot be reproduced here: they will be found in the annual official *Review of the Trade of India*, which is printed in India and presented to Parliament, purchasable for 2s. Before the War the immense and increasing amount of the Indian trade and its value and importance

to Great Britain were shown by the statistics. Trade, as stated, has adjusted itself successfully to the new conditions.

FINANCIAL DETAILS

The principal sources of revenue and heads of expenditure were (gross) in round numbers, according to the revised Estimates for 1916-17, as follows, in pounds sterling—

REVENUE.		EXPENDITURE.	
	million £		million £
Land Revenue	22	Direct Demands on Revenue	9½
Opium	3½	Interest	2½
Salt	4½	Posts and Telegraphs	3½
Stamps	5½	Mint	1
Excise	9½	Civil Departments	19½
Customs	8½	Miscellaneous Civil Charges	5½
Other Heads	7	Famine Relief and Insurance	1
Interest	1½	Railways	14½
Posts and Telegraphs	4½	Irrigation	3½
Mint	1	Other Public Works	4½
Receipts by Civil Departments	10½	Military Services	26½
Miscellaneous	1½		
Railways, Net Receipts	21		£89½
Irrigation	5		
Other Public Works	1	Surpluses	7½
Military Receipts	1½		
Total	£96½	Total	£96½

The total permanent debt on 31st March 1916 was £278,811,676, of which nearly 277 millions were for public works and 1½ millions for the new capital at Delhi. The temporary debt being 11½ millions, the total indebtedness was 290 millions. The "Home Charges" in 1915-16 amounted to £19,403,939. Up to the same date the construction of railways had cost 234½ millions, which, in 1915-16, gave a net gain of over 4 millions to the State. Against the debt the assets are more than counterbalancing, in the value of the railways, irrigation works, cash currency, loans repayable, etc. The closing Government cash balance at the end of 1915-16 was £24,819,404 (including £5,792,631 cash placed by the Secretary of State at short notice); the Gold Standard Reserve (held to secure the maintenance of Exchange at the rate of 1s. 4d to the rupee) was 26½ millions (including the 5½ millions just mentioned).

NATIVE CHRISTIANS

The spread of Christianity in India¹ is a matter of deep interest, upon which full details will be found in the annual reports of the

¹ St Francisco de Xavier (1506-52) began missionary work in India in 1542 at Goa, and among the Paravas, the pearl-fishermen. His course lay through Travancore, Ceylon, Mailapur, Malacca, the Malay Archipelago, India and Malacca again, Japan, Goa, Singapore; he died on the Chinese coast of Kwangtung, and was eventually buried at Goa. The first Protestant missionaries were the Lutherans at Tranquebar in 1706, the Baptists at Serampore in 1793, and the Anglican Church in 1813.

various missionary societies at work in the country and much valuable information in the Provincial Census Reports. These show a remarkable increase of Native Christians during the previous decade ; but it is noticeable that in many instances this is very much more marked in new than in old fields of missionary work. In the decade 1901-11, the Christians in India increased from 2,923,241 to 3,876,203, or nearly a million—*i.e.*, 32 per cent. The total population of the country increased by 6.5 per cent. In the Telugu districts of the Madras Presidency the rate of increase of the Indian Christian population during the ten years was over 50 per cent. ; in the United Provinces over 74 per cent. ; in the Hyderabad State, in the Deccan, over 136 per cent. ; and in the Panjab the numbers rose from 34,000 to 163,000, *i.e.*, by 380 per cent. From 1881 to 1911 the total number of Christians in the Indian Empire rose from 1,862,000 to 3,876,000, whereas the total population increased from 254 to 315 millions. The Anglicans (dating from the admission of missionaries to India in 1813) numbered, in 1911, 492,752, of whom 332,807 were Indians, 34,553 Anglo-Indians, and 125,392 Europeans. The Roman Catholics, dating from the mission of St F. de Xavier, were in 1911 1,490,863, including 1,393,720 Indians, 57,024 Anglo-Indians, 40,120 Europeans ; the Syrian Christians were 315,162, the Romo-Syrians 413,142, of whom, in both cases, nearly all were Indians (the Syrian church of Travancore and Cochin dating, probably, from the 4th century, many of its members having joined the Roman obedience in the 15th to 16th centuries, and being classed as Romo-Syrians) ; the Baptists were 336,596 ; the Lutherans and allied denominations 218,500 ; the Presbyterians 181,128, of whom 15,150 were Europeans ; the Methodists were 171,844 ; the Congregationalists 135,265 ; and the Salvation Army 52,407, all Indians but 208. Of the total number of Christians, 3,574,770 were Indians, nearly 200,000 Europeans (including the British troops), and nearly 102,000 Anglo-Indians.

The number of Indian Christians increased in the decade 1901-11 by 34.2 per cent. The greater part of the conversions to Christianity have been from the depressed classes, *i.e.*, from the lowest castes amongst the Hindus, and from the aboriginal races, Kols, Santals, etc. As to conversions from Islam, it is estimated that converts and their descendants may number something like 15,000. The movements referred to have continued with increased momentum. The most striking new development is the increased desire for education and emancipation among women of the higher classes, resulting in the establishment of an important Christian College for women, in Madras, besides many new Secondary Schools for girls. In the Madras Presidency Native Christians of all descriptions, numbered,

in 1911, 1,208,515, showing an increase of 16.3 per cent. in the previous decade; the actual increase numerically was 169,652. In the Madras States there were 1,154,209 Christians, of whom 1,136,960 were in Travancore and Cochin, the converts being chiefly from the lower classes; in 1911 the proportions were 694,294 of the Roman Catholic Communion, 168,873 of the Anglican, 119,000 of the Baptist, and 105,215 of the Lutheran. The districts with the largest Christian populations are Tinnevely, Kistna, Trichinopoly, Tanjore, S. Arcot, and Nellore. The Syrian Christians (see p. 566) numbered 3101 Jacobites and 730 Reformed and unspecified. In the Bombay Presidency there were, in 1911, 191,173 Native Christians, an increase of over 11 per cent. in the decade; of these, in that year, 147,121 were Roman Catholics and 34,339 of the Anglican Communion. Of the 23,592 (25,210 in 1901) Christians in the Kaira District, 7000 were, in 1911, Salvationists (11,000 in 1901). In Bengal, as constituted since 1st April 1912, the total number of Christians in 1911 was 129,518, of whom 46,258 were Roman Catholics, 38,976 Anglicans, 23,893 Baptists, and 7722 Presbyterians. In Bihar and Orissa there were, in British territory, in 1911, 229,825 Christians, of whom 93,511 were Roman Catholics, 88,051 Lutherans, 37,397 Anglicans, and 7374 Baptists. While the total number of Christians in Bengal had risen by only 23,150, there was an increase of 95,767 in Bihar and Orissa. In the Chota Nagpur plateau there was an addition of 52,397 in the Ranchi District, and of 31,934 in the Gangpore State. Since 1901 the growth in Ranchi has been 42 per cent.; the converts in 1911 numbered 177,112, or 13 per cent. of the population; in fact, there were more than twice as many Indian Christians in this District as in the whole of Bengal. In the decade 1901-11 all the Missions in Ranchi made advances: the Roman Catholic from 54,401 to 77,844, the Lutheran from 57,668 to 75,581, the Anglican from 13,078 to 23,856. Next to the Ranchi District the largest numbers of Native Christians are to be found in the Santal Parganas, viz., 9731. Mr L. S. S. O'Malley's Report on the Census (1911) of Bihar and Orissa has some interesting paragraphs (487 to 504) on Indian Christians, Christian Missions, their history, and the numerical results of their labours. In the United Provinces of Agra and Oudh there were, in 1911, 179,694 Christians, against 102,955 ten years before. There the Indian Christians have risen from 69,000 to 138,000; the Methodists had 104,000 converts. The influence of Christianity is strikingly illustrated by the figures for Bihar and Orissa, where the proportion of Indian Christians who are literate (able to read and write) is 76 per 1000, compared with only 5 per 1000 amongst their animistic congeners. In the Panjab the Indian Christians numbered, in 1911, 163,220,

mainly from the Chuhra tribe, which includes sweepers; the largest numbers are in the Sialkot District and on the Chenab Colony (p. 324), where their development will be a matter of special interest. In 1881 there were only 4000 Native Christians in the Panjab. Whatever may be individual opinions regarding the work or results of proselytising in India, the value of the work done in the mission colleges and schools is immense, and is becoming very far-reaching in its effects. The Protestant missions with the largest number of converts are the C.M.S., American Baptist Union, Methodist Episcopal Church, London Missionary Society, and S.P.G. The efforts of the missionary societies are necessarily dependent to a great extent on the financial support they receive from Great Britain, Europe, and America. The movement—towards conversion—is partly social, owing to improvement in the condition of the people through British rule; partly religious, owing to missionary work. Converts ordinarily show a very marked elevation in morality and education, which results in a reflex influence on the higher classes. On the latter Christianity has its effect chiefly through education; but the conversions are far less numerous than among the lower classes, though there are not a few prominent cases. The spread of ethical and philanthropic ideals of Christianity also operates, largely through medical missions. According to the latest reports available, the Anglican and Protestant missions in India had 436 medical missionaries, so that the number of mission hospitals and dispensaries was about 900. The number of pupils in elementary mission schools was about 1,250,000; the missionary colleges had about 5500 students. The European missionaries at work numbered about 5200, of whom 2076 were men, and 3124 women; the Indian missionaries were about 38,458, of whom 28,320 were men and the rest women. The Roman Catholic missions had 1300 students in colleges, and 2751 schools with 98,000 pupils. The total number of pupils in Roman Catholic schools was 143,000 boys and 73,000 girls.

In Ceylon there were 54,967 scholars in Roman Catholic, 32,713 in Anglican, and 29,192 in Wesleyan schools. In Burma the Anglican Mission had 16 ordained Indian missionaries and 10,000 Indian Christians connected with it. The American Baptist Mission had about 200 American missionaries (including wives) and 2200 Indian workers, with a total of 120,549 Christian adherents to the Mission.

THE MUTINY OF 1857

As the mutiny of the Bengal army in 1857 forms, perhaps, the most important episode in the whole history of British rule in India,

and as it is fraught with special memories for all Englishmen, a brief sketch of the principal outlines of it is given here.

From 1764 to 1857 the history of British rule is marked by various mutinies among the native troops or sepoys. Ever since the days of Dupleix and Clive, sepoys, led by European officers, have formed the principal part of European armaments in India, in which the fighting races have ever been willing to serve for the sake of two kinds of reward—pay and prestige. The first serious mutiny, in 1764, was for an increase of pay. It was promptly suppressed by Major Hector Munro, who refused the higher pay, and ordered the twenty-four ringleaders to be blown from guns. There was a more extensive rising in Madras in 1806. It began at Vellore (p. 536), where a number of British officers were murdered, but Colonel Gillespie galloped from Arcot, eight miles off, recaptured the fort, and killed or dispersed the mutineers. On this occasion the complaint of the sepoys was that orders had been issued forbidding the use of earrings and caste marks and beards, and that the new hat had a leather cockade made from skins which were unclean to them. The dethroned Muhammadan Princes of Mysore, who lived with numerous attendants in the fortress of Vellore, told the sepoys that the new regulations were intended to deprive them of their caste and force them to become Christians; and the report was spread that the British power had been extinguished by Napoleon. The mutinous spirit extended nearly throughout Madras before it was finally quenched. The Home Government declared that the mutinies were due to the fear of being Christianised, to the residence of the Princes at Vellore, to the annexations of Lord Wellesley, which had shaken confidence in British moderation and good faith, and to a loss of authority by British officers over their men. The analogy between Vellore in 1806 and Meerut in 1857 is very striking, the chief difference being that the sepoys had greater causes of discontent in 1857, and that at Meerut there was no Gillespie. At the latter date the religion of the sepoys seemed to them to be in greater danger than ever; the capital of India—Delhi—was the home of the dethroned descendant of the Mughals; Lord Dalhousie's annexations had far exceeded those of Lord Wellesley, and seemed likely to be still further pursued; the discipline of native regiments was disturbed by the encouragements held out to their British officers to seek employment on the General Staff; and Russia in the Crimea was supposed to have destroyed British power more effectively even than Napoleon. And yet Vellore had been so completely forgotten that Sir Henry Lawrence was one of the few prominent Englishmen in India who foresaw the rising or understood what it would mean. Generally there was on all sides a blind, if touch-

ing, faith in the loyalty of the sepoys, which in the case of the officers of native regiments was only extinguished by sepoy murderers.

The eight years from 1848-56, when Lord Dalhousie was Governor-General, will long be remembered in India. They form a period of large social and material reforms and developments of the railways and telegraphs, and are also specially remarkable for British annexations of native territory. After two severe struggles with the warlike Sikhs the Panjab was conquered, and was annexed in 1849. Lower Burma was taken over after a war in 1852, and Oudh, without conquest, in 1856. By a doctrine, not generally applied in the past, the territory of Native Princes who died without an heir of the body was now treated as lapsed to the British, an adopted heir not being recognised, and under this rule were resumed the principalities of Satara, Jaitpur, Jhansi, Sambalpur, and Nagpur. It was also decided that the stipends which had been paid to those Native Princes who had been deprived of their territories in former years should not be continued to their successors. Among others, the Nana Sahib, the adopted heir of the ex-Peshwa of Poona, Baji Rao II., once the head of the Mahrattas, was refused the personal pension of £80,000 per annum which his father had enjoyed during his life. The descendant of the Mughals, Bahadur Shah, had been informed that his successor would not be allowed to live at Delhi or to retain the regal title. And when the territory of the loyal King of Oudh was annexed, owing to his persistent misgovernment, the surplus revenues of the State, after payment of a substantial pension to the King, were gathered into the coffers of the British Government. All this looked like a policy of unjust and high-handed aggression. The natives understood annexation after conquest, and the conquered Provinces of the Panjab and Lower Burma remained loyal throughout the Mutiny. But now every Native Prince feared for his dominion, as the British seemed to be absorbing all such territory, either by conquest or on the plea of misgovernment or by the new application of the rule excluding adopted heirs; and this policy seemed to be further evidenced by the resumption of pensions and the confiscation of the surplus revenue of Oudh. Of the chiefs directly affected, the Kings of Delhi and Oudh were Muhammadans, who considered themselves the natural rulers of India and likely to profit by the ejection of the British; while the Rani of Jhansi and the Nana Sahib were Mahratta Hindus, and the Mahrattas had practically conquered the Muhammadans when the British intervened in 1803. The leaders of two of the most warlike races in India, and of the two religions, were under the belief that they had met with harsh treatment at the hands of the British; and they determined, if possible, to work

on the sepoys, the greater number of whom were Brahmans, and other high-caste men from the Oudh country and the Gangetic Doab, and a portion of whom were already in an insubordinate condition.

In 1856 one of the first innovations of the new Governor-General, Lord Canning, was the General Service Enlistment Act, by which all future recruits in Bengal were made liable for service outside the Company's dominions without extra pay. This had always been the rule in the Madras and Bombay armies. But the Bengal sepoy was a man of high caste, and had enjoyed privileges in the past. He was now, he considered, threatened with the loss of caste by being taken over the sea (the dreaded *kāla pāni*, or "black water") to serve in Burma; and, while he held that he alone had conquered India for the Company, he believed that he was now to be used for further conquests without any increase of pay in regions far from his home. The agitators impressed upon his superstitious and credulous mind that the railways and telegraphs which had recently been introduced were a kind of magic designed to oppose him, and that the new law of 1856, made by Lord Canning, which permitted the re-marriage of Hindu widows, and the new zeal for education, were really attacks upon his religion. The sepoys knew, also, that while the British troops had been reduced by drafts sent to the Crimea and to Persia, the native army had been increased for the purpose of garrisoning the recently-acquired territories, and that the British force was in 1856 only 45,000 to 235,000 sepoys. The prestige of England had been shaken by the disasters of the Afghan War of 1838-42; it was believed that the British had been beaten in the Crimea; and an old prophecy was revived which foretold that the Company's reign would end in 1857—one hundred years after the Battle of Plassey, 23rd June 1757. At this critical moment, with Mughal and Mahratta, Muhammadan and Hindu Princes seriously disaffected towards the British, with an army of high-caste soldiers alarmed concerning their pay, their privileges, and their religion, and with the British force unduly reduced, there occurred the famous cartridge incident. A new type of rifle having been issued to the sepoys, the unhappy blunder was perpetrated of smearing the cartridge with a composition of the fat of the cow—the sacred animal of the Hindus. On complaints being made, the British officers declared that no cows' fat had been used for the cartridges issued to the men; but this did not satisfy them, and the Commander-in-Chief himself (General Anson) expressed the opinion that he was not surprised at their alarm at the appearance of the greased cartridges. In these circumstances it was clear that any untoward incident might precipitate a general mutiny.

The first regiment to mutiny was the 34th Native Infantry at Barrackpore, near Calcutta, in February 1857, and this was followed in March by the 19th at Berhampore, in the same neighbourhood. Both these regiments were disbanded, and the 84th (British) was brought over from Burma to Barrackpore. But nothing else was done. "Allahabad and Delhi, the two chief fortresses, arsenals, and strategical positions of the North-Western Provinces, were still without the protection of British garrisons, and no steps—such as the collection of supplies and carriage—had been taken anywhere for the prompt movement or mobilisation of British troops" (Macleod Innes). On the 3rd May the 7th Oudh Irregulars mutinied at Lucknow, and were disarmed by Sir Henry Lawrence. Then on Sunday the 10th came the great outbreak at Meerut, 42 miles from Delhi. The sepoys, after murdering some of their officers and other Europeans, and liberating some of their comrades, who had been imprisoned for insubordination, made off for Delhi. On arriving at that place on the 11th they were joined by the three regiments there, when it was seen that no pursuit from Meerut was to be feared; and after the Arsenal had been captured and many officers murdered and every vestige of British authority destroyed, they declared the King of Delhi Emperor of India, and his sons placed themselves at their head.

Probably this forward move of the Mughal party aroused the jealousy of the other rival conspirators, and for three weeks there was no other mutiny. But when the natives found that days and weeks passed without any punishment being inflicted, they began to think that the British power was really at an end. On the 30th May the 71st Native Infantry mutinied at Lucknow, and from this date there was a general rising. In some cases British officers, women, and children were all murdered; in others the men alone were killed; but in others they were all spared, and even escorted by the mutineers out of harm's way. As each regiment rose, it made for Delhi, Cawnpore, or Lucknow, which became the centres of the conflict.¹ While Delhi, the historical capital of India, was in the hands of the rebels, Sir Hugh Wheeler, at Cawnpore, with a mere handful of soldiers, was surrounded by overwhelming numbers from the 6th June, and at Lucknow a garrison under Sir Henry Lawrence was closely invested from the 2nd July.

On the 10th of May there were between Calcutta and Meerut only three British regiments—the 14th at Dinapore, the 32nd at

¹ A more detailed account of the events at these important places will be found on pp. 253, 406, and 387. The sequence of events throughout India will best be seen by referring to pp. cxlii-cxliii of the Chronology.

Lucknow, and a Company's Regiment, the 3rd Europeans, at Agra. Lord Canning, who was at Calcutta, made energetic efforts to obtain reinforcements. The Madras Fusiliers, under Colonel Neill, arrived at Calcutta on the 23rd May; the 64th and 70th from Persia early in June; and other British troops from Burma, Ceylon, and Singapore, and loyal sepoys from Madras, were soon collected. A force which was on its way to China was, with the consent of Lord Elgin, diverted to Calcutta; several regiments were despatched from the Cape Colony; and urgent requests for additional troops were sent to England. But the means of transport for those on the spot were altogether insufficient; the railway from Calcutta had been completed only as far as Raniganj, a distance of 120 miles, and there was difficulty in procuring country carriage; and so it happened that the troops from Calcutta were only just in time to secure Benares and Allahabad, and it was not till the 7th July that General Havelock was able to advance from the last place with an inadequate force of 2000 men. General Anson, who was at Simla in May, at once collected the British and Gurkha regiments which were in the hills, and began to move on Delhi; but his progress was slow, owing to lack of transport and commissariat, and on the 27th May he died of cholera at Karnal. The attack upon Delhi did not begin until the 8th June, when Sir H. Barnard, with a force amounting to 3800 men, defeated a rebel army of 30,000 men at Badli-ki-sarai, and thus obtained possession of the famous ridge overlooking the walls of Delhi. General Barnard died of cholera on the 5th July, and was succeeded by General Reed, who resigned on the 17th owing to ill-health, handing over the command to General Archdale Wilson. The mutineers had purposely timed their rising for the beginning of the hot weather, knowing how debilitating active operations are at that period to all Europeans. For some time the British, while affecting to invest Delhi, were themselves closely besieged on the ridge. In the Panjab Sir John Lawrence was ably supported by such men as Chamberlain, Nicholson, Edwardes, and Montgomery; and the local mutinies or threats of mutiny at Peshawar, Naushahra, Multan, Meean Meer, and Ferozepore were energetically suppressed by disarmament, and the important arsenals at Phillaur and Ferozepore were secured. A movable column was formed, under the command, first, of General Chamberlain, and afterwards of General Nicholson, to suppress any further risings in the Panjab, and then to march on Delhi; the value of the courage and decision of Nicholson can hardly be over-estimated. The Panjab was in a restless condition. With his small force, moving from place to place, disarming or dispersing the mutineers, Nicholson kept mutiny from spreading. But it was not until the 14th August, three months after the Meerut

outbreak, that he was able to join the British force at Delhi. No final move could be made there until, on the 6th September, the siege guns arrived from Ferozepore. These opened on the walls on the 11th, and prepared the way for the storming of the city on the 14th and the final capture of Delhi on the 20th. It came not a day too soon. Sir John Lawrence had emptied his province of British troops, sending every possible man to Delhi; and the Sikhs and other Panjabis were becoming uneasy at the idea that the British might not regain their position. If these troops had not stood by us, we should have had to begin again the conquest of India.

Meanwhile the British between Calcutta and Delhi were in sore straits. At Agra the sepoys were disarmed on the 31st May; but, although the Maharaja Sindhia of Gwalior was himself loyal, his fine body of disciplined troops only awaited an opportunity to march on Agra. At Cawnpore Sir H. Wheeler's small garrison capitulated on the 26th June, and were massacred next day, most of the women and children being made prisoners. At Lucknow a small British force was holding out against enormous numbers of the enemy. General Havelock advanced to their assistance with 1400 British and 600 Sikh troops, leaving Allahabad on the 7th July. The line between Calcutta and Allahabad was disturbed and communications threatened, and no substantial reinforcements could be sent to him till the middle of September. When he had marched for five days from Allahabad he defeated a large force of mutineers and Mahrattas at Fatehpur, and fought two other successful battles on the 15th of July at Aong and Pandu Nadi. On the evening of that day, being then 22 miles from Cawnpore, he learned that the British women and children of Wheeler's garrison were still alive, and, tired as his men were, he marched them 14 miles that night, defeated the Nana Sahib next day in three separate actions, and rested his weary troops on the outskirts of Cawnpore on the evening of the 16th. The heat was so intense that some of his men died from sunstroke or exhaustion. The captives had, however, been murdered by the orders of the Nana on the 15th, when General Havelock had started on his last desperate effort to save them. On the 17th he occupied Cawnpore. On the 20th, leaving 300 men under General Neill, he began the crossing of the Ganges with 1500 men. On the 29th he defeated the rebels at Unao and Basiratganj; but, finding immense numbers of mutineers still between him and Lucknow, while his own force had been reduced to 850 effectives, he had no alternative but to retire to Cawnpore. On the 4th August he marched out of Cawnpore a second time with 1400 men; on the 5th he again defeated the rebels at Basiratganj, but his losses from

disease, as well as battle, had been so great that it was hopeless to proceed farther, and he fell back once more, reaching Cawnpore on the 13th. On the 16th he attacked and defeated 4000 sepoys at Bithur. He had now only 1000 effectives. In his front towards Lucknow were some 30,000 rebels; at Farrukhabad were probably as many more; he was threatened on both flanks; and had to face on the South the Gwalior Contingent and many other smaller bodies —yet he courageously determined to keep his position at Cawnpore instead of falling back upon Allahabad. The relief of Lucknow was, however, out of the question until reinforcements arrived. These dribbled in during the next month, but there was dangerous delay between Calcutta and Allahabad, some 6000 men, who might have been sent on to Havelock, being detained to suppress local disturbances. On the 15th September Sir James Outram, who had been appointed to command the relieving force, arrived at Cawnpore, but in the most generous and chivalrous manner forbore to supersede General Havelock, and thus left the honour of relieving Lucknow to the man who had already made such able and gallant efforts to that end. At length, on the 19th September, General Havelock crossed the Ganges with 3000 men. He defeated the rebels at Mangalwar on the 21st, and on the 23rd, 24th, and 25th gradually fought his way into Lucknow, and finally effected a junction with the garrison late in the evening of the last date with a loss of 700 out of his 3000 men. General Outram then took command of the old and the new garrisons at Lucknow. Delhi having fallen to the British between the 14th and 20th September, many of the mutineers there proceeded to Lucknow, and General Outram found it impossible to fight his way out taking with him the women, children, and sick of the old garrison. He therefore remained on the defensive, closely invested, until the final relief of Lucknow two months later.

The dangerous period of the mutiny ended with the capture of Delhi and the first relief of Lucknow towards the end of September. From this time the British position was assured by the arrival of reinforcements from England. In front of them came Sir Colin Campbell, the newly-appointed Commander-in-Chief in India, who reached Calcutta on the 17th August. His first care was to arrange that regular detachments of the reinforcements should be forwarded with all speed. Then he started for the seat of war, and reached Cawnpore early in November. Leaving 1000 men under General Windham at that place, he moved on Lucknow with 5000; reached the Alam Bagh on the 12th November; left a garrison there; marched upon the rebels with 4200 men on the 16th; and effected a junction with Outram's beleaguered force on the 17th, though with

a loss of nearly 500 men. The original Lucknow garrison, which had been closely invested since the 2nd July, a period of more than four months, was thus finally relieved. But Sir Colin found the rebels so numerous, and the difficulty of escorting the women, children, and sick safely out of Lucknow so great, that he felt unable to hold Lucknow, in addition, and accordingly evacuated it on the 22nd, leaving General Outram at the Alam Bagh with 4000 men to maintain the appearance of British authority. General Havelock died of dysentery on the 24th November. When Sir Colin reached Cawnpore with his precious human freight he found that General Windham had been defeated by the Mahratta Tantia Topi, and had been gradually forced out of the city of Cawnpore into his entrenchments on the banks of the Ganges. On the 3rd December the families and sick from Lucknow were sent on to Allahabad, and then Sir Colin attacked Tantia Topi and dispersed his army. Beyond clearing the Doab, the country between the Ganges and Jumna, little was done in the next three months except to collect further troops. On the 2nd March 1858 Sir Colin joined General Outram at the Alam Bagh with a force which the constant streams from Calcutta had at last raised to 19,000 men with 120 guns. To this was shortly added a brigade under General Franks and a contingent of Nepalese under Maharaja Jang Bahadur, which brought the army up to a total of 31,000 men and 164 guns. The mutineers in Lucknow numbered 90,000 trained men and a large force of irregulars, and they had employed their respite in erecting three strong lines of defences around their position. Sir Colin's attack began on the 7th March, and he finally drove off the enemy and captured Lucknow on the 15th.

On the 20th Lord Canning issued the Confiscation Proclamation, by which the estates of all the important chiefs in Oudh were escheated. Most of them, although certainly not loyal, had abstained from active participation in the revolt. They now rose, and were joined by other leaders who believed that they would be similarly treated, and had, therefore, nothing to lose but everything to gain by opposing the British. Thus it happened that, although the sepoys were dispersed, only small bands of them still remaining in the field, new enemies sprang up who were not subdued until the end of the year 1858, by which time there were 100,000 British troops in India. Of the various British brigades which operated in different parts of the country, the principal was that under Sir Hugh Rose (afterwards Lord Strathnairn) in Central India. On the 8th January 1858 General Rose left Mhow with a Bombay force, and, marching northwards, captured the fortresses of Rahatgarh on the 28th and Garhakota on the 13th February. After several successful battles he arrived

before the walls of Jhansi on the 21st March. On the 1st April he totally defeated Tantia Topi, who was marching to the relief of Jhansi with 22,000 men, and stormed and captured Jhansi on the 4th April. The Rani fled with her defeated troops towards Kalpi, where Tantia Topi was collecting another army. General Rose marched out of Jhansi on the 25th April, defeated Tantia Topi on the 6th May, and captured Kalpi on the 23rd. The Rani then fled to Gwalior, where she was joined by the Maharaja's troops, and thus obtained possession of the strong fortress. In spite of the great heat General Rose marched upon Gwalior, and took it on the 20th June, the Rani, dressed as a man, being killed in one of the actions which took place round the fortress. The Mahratta leader was persistently hunted through Central India and Rajputana during the summer and the ensuing cold weather, and covered 3000 miles in his flight before he was betrayed ten months later, on the 7th April 1859, and was tried and hanged. He had fought against us gallantly for over a year; but he had also given the signal for the massacre on 27th June 1857 at the Sati Chaura Ghat at Cawnpore. Meanwhile the rebellion in Oudh and the North-West Provinces had been gradually suppressed, and the Nana had been driven into the Nepal jungle, where he is believed to have died of fever. The prophet who had announced that the Company's rule would end in 1857, a hundred years after the Battle of Plassey, was not far out in his reckoning. On the 1st November 1858, at a grand darbar at Allahabad, Lord Canning announced that the Company's possessions in India were transferred to the British Crown.

Since the mutiny there has been a great change in British policy. The British troops, in 1857 one-sixth of the native, are now one-half.¹ All the strong fortresses, magazines, and arsenals, are garrisoned by British soldiers; there are no batteries of native artillery of any importance; and the modern preparations for transport, commissariat, and mobilisation, combined with the railway system and telegraphs (including wireless telegraphy), ensure the speedy movement of British troops to any given spot. The high-caste sepoy has been to a considerable extent replaced by a less exacting soldier, and the danger of a groundless religious panic thereby lessened. The right of adoption, for which many of the Chiefs fought, has been conceded. The policy of annexation in India has been abandoned. The pay of the sepoy has been raised, whether on service in his own country or in foreign districts; and to the British officers of native regiments—still too few in numbers in spite of a wise recent increase—the

¹ In 1915-16: European army, 74,766, including officers; Indian army, 163,055, including 3197 European officers and non-commissioned officers (*Moral and Material Progress Report of India, 1915-16, p. 56*).

attractions of civil or staff employment are not so freely offered as they formerly were. Both races have learned their lesson. The best proof is that, whereas formerly sepoy mutinies were of frequent occurrence, no single example has occurred in the space of sixty years to revive memories of the great tragedy of 1857.

REMARKABLE EVENTS CONNECTING INDIA WITH EUROPE, AND IN INDIA

	DATES
The Portuguese Vasco da Gama, sailing round the Cape of Good Hope, reached Calicut on the Malabar Coast	1498
Portuguese factory at Cannanore, 1501. Fort there	1505
The Portuguese Viceroy, Albuquerque, captured Goa	1510
Portuguese established at Calicut (abandoned in 1525), Cannanore, Goa, Ceylon, Socotra (1507), Malacca (1511), Ormuz (1525), Chaul (1531)	after 1510
Attempt to reach India by the N.E. and N.W. passages	1528
The Portuguese began to frequent the Hooghly	1530
Arrival of St Francis Xavier, S.J., in India	1542
Portuguese supremacy in the Eastern seas	up to 1595
Bassein, Salsette, and Bombay ceded to the Portuguese by the Chief of Gujarat, 1534. Diu, 1535. Daman	1559
Attempts to force a N.W. passage to India	1576-1616
Thomas Stephens, of New College, Oxford, became rector of the Jesuits' College at Salsette	1579
The Portuguese power in India suffered from the Union with Spain, which lasted	1580-1640
The Levant Company's Expedition reached India by land	1589
The first Dutch fleet doubled the Cape of Good Hope	1595
The Dutch in India	1596-1824
Commercial ascendancy of Holland in the Eastern seas	17th century
Charter from Queen Elizabeth to "The Governor and Company of Merchants of London trading to the East Indies"	31st December 1600
Nine "separate" voyages of the East India Company to India	1600-12
The Dutch East India Company formed	1602
Foundation of the first English factory by Lancaster at Bantam, in Java	1602-03
The first French East India Company formed	1604
Captain Hawkins at Surat and Agra as envoy to the "Great Mogul"	1608
The Dutch occupied Pulicat (23 m. N. of Madras)	1609

The Emperor Jahangir issued a proclamation permitting the English to establish factories at Surat, Ahmadabad, Cambay, and Gogo.	
An English factory founded at Masulipatam. The second French East India Company	1611
The first Danish East India Company formed. Captain Best defeated the Portuguese squadron at Swally, off Surat. Factory established at Surat	1612
The third French East India Company	1615
Sir Thomas Roe, ambassador to Jahangir, obtained favourable concessions for English trade	1615-18
Decline of Spanish and Portuguese power in India	1615-50
Tranquebar granted to the Danes	1616
English Agents in Bengal, at Agra and Patna	1620
The English occupied Ormuz, in the Persian Gulf	1622
The English at Batavia resolved to withdraw from the Moluccas, Amboyna, and the Spice Islands	January 1623
Massacre of the English by the Dutch at Amboyna	February 1623
An English factory founded at Armagaon, on the Coromandel coast	1626
French Companies formed under Richelieu	1630-42
The English Company allowed to trade in the Mughal dominions	1634
Surat the chief establishment of the English	1638
Fort St George founded at Madras by Francis Day	1639
The East India Company's factory at Hooghly	1640
Gabriel Boughton, surgeon of the <i>Hopewell</i> , obtained from the Emperor Shah Jahan exclusive privileges of trading in Bengal for the English Company as a reward for his professional services to the Governor of Bengal	1645
Dutch colony at the Cape of Good Hope as a half-way station to the East	1651
First war between England and Holland	1651-54
Madras (Fort St George) made into a Presidency	1653
Treaty of Westminster, between Oliver Cromwell and John IV. of Portugal, opened the Portuguese E. India to the English	10th July 1654
Oliver Cromwell's charter to the East India Company	1657
The Dutch drove the Portuguese from Ceylon. Madras made independent of Bantam, in Java	1658
Murder of Afzal Khan by Sivaji	1659
The Dutch took Negapatam from the Portuguese	1660
Rise of the Mahratta power under Sivaji	1660-80
Bombay ceded to England by the Portuguese as part of the dowry of the Infanta Catherine of Braganza on her marriage with Charles II.	1661
Sack of Surat by Sivaji. French East India Company established by Colbert. English Settlement at Calicut	1664
Second war with Holland	1665
Treaty of Breda, settling disputes in Asia	1667
Bombay granted to the East India Company for £10 annual rent	1668
Second sack of Surat by Sivaji	1670
Third war with Holland	1672
French settlement established at Pondicherry by F. Martin	1674
Death of Sivaji	1680
Bengal made a separate Presidency	1681
East India Company's factory moved from Surat to Bombay	1687
East India Company's war against Aurangzeb	1687-89

	DATES
Calcutta founded by Job Charnock	24th August 1690
War in Europe with France	1690-97
East India Company built Fort William at Calcutta	1696
The Peace of Ryswick. Pondicherry restored to the French	1697
A new English Company formed, with a capital of £2,000,000.	
French settlement at Calicut	1698
The old Company bought the site of Calcutta from Azim-us-shan, Governor of Bengal	1700
The old and new Companies formed into "The United Company of Merchants of England trading to the East Indies"	1702
War with France	1702-13
Death of the Emperor Aurangzeb, and rapid decline of the Mughal power	1707
Through the arbitration of Lord Godolphin, 1708, the two English Companies were amalgamated	1709
Peace between France and England	1713-44
Mauritius occupied by the French, 1715. Growth of French East India Company	1715-45
New French East India Company	1722
The Austrian Emperor, Charles VI., granted a charter to the Ostend Company, 1723. Withdrawn	1725
India invaded by Nadir Shah of Persia. General massacre at Delhi and immense treasure carried away	1739
Dupleix, Governor of Pondicherry	1741-54
Aliverdi Khan, Nawab of Bengal	1742
England and France at war in Europe	1744
A French fleet under La Bourdonnais captured Madras	14th Sept. 1746
French and English at war on the Coromandel coast	1746-49
A British fleet under Admiral Boscawen besieged Pondicherry, but was repulsed, 1748. The treaty of Aix-la-Chapelle, 1748, restored Madras to the British	1748-49
Ahmad Shah Abdali (Durani) seized the Panjab	1748-51
Nizam-ul-mulk (Chin Kilich Khan, Asaf Jah), of the Deccan, died	1748
War of Succession in the Carnatic	1749-54
Dupleix placed his nominees on the thrones at Hyderabad and Arcot. The British supported Muhammad Ali at Arcot. War between the English and French in the Carnatic	1751-54
Bussy at Hyderabad. Capture and subsequent defence of Arcot by Clive	1751
The French capitulated at Trichinopoly, 13th June. Danish factory established at Calicut	1752
Clive returned to England	1753
Dupleix superseded. Treaty of peace between the British and French signed at Pondicherry	1754
Clive returned to India	1755
War between France and England. Suraj-ud-daula, Nawab of Bengal, captured Calcutta, 20th June. The tragedy of the Black Hole	1756
Recapture of Calcutta by Clive, 2nd January. Battle of Plassey, 23rd June. War with France renewed in the Carnatic	1757
Ahmad Shah Abdali occupied the Panjab	1757-60
Mahratta invasion of the Panjab	1758
Lally arrived with a French fleet. He took Fort St David and Arcot; besieged Madras; raised the siege, 1759. Clive appointed the first Governor of the Company's settlements in Bengal	1758-59

- Clive, through Colonel Forde, defeated the Dutch at Biderra, near Chinsura 25th November 1759
- Eyre Coote totally defeated Lally at the battle of Wandiwash, 22nd January. Arcot taken by the British. Clive sailed for England 1760
- Period of misrule in Bengal 1760-65
- Pondicherry capitulated to the British. Fall of the French power in the Deccan. Ahmad Shah Abdali defeated the Mahrattas at Panipat 1761
- Pondicherry restored to the French by the treaty of Paris. Massacre of English prisoners at Patna 1763
- The first sepoy mutiny suppressed by Major Hector Munro, who defeated the Nawab-Wazir of Oudh at the decisive battle of Buxar, 23rd October. Dupleix died in poverty at Paris 1764
- Lord Clive arrived at Calcutta as Governor of Bengal and Commander-in-Chief. The revenues of Bengal, Bihar, and Orissa granted to the Company by the Emperor, Shah Alam II. Alliances with the Mughal Emperor and the Nawab-Wazir of Oudh 1765
- The Northern Circars (Sarkars) ceded to the British. Clive prohibited the servants of the Company from engaging in private trade or accepting presents, and increased their salaries. Lally executed at Paris 1766
- Clive left India, 1767. The Nizam and Hyder Ali attacked the British. First Mysore war 1767-69
- The Nizam ceded the revenue of part of the Carnatic 1768
- Hyder Ali overran the Carnatic and dictated a peace within a few miles of Madras. Treaty with the Nizam, Mysore, and the Mahrattas 1769
- Terrible famine in Bengal 1770
- The East India Company stood forth as Diwan of Bengal 1771
- Mahratta incursions into North-West India 1771-73
- Parliamentary Committee on Indian affairs. Warren Hastings Governor of Bengal. Treaty between the Nawab-Wazir of Oudh, and Rohillas, for defence against the Mahrattas 1772
- Motion condemning Clive's conduct in India defeated. The Regulating Act passed by Parliament. Agreement between Hastings and Oudh Nawab for joint invasion of Rohilkhand 1773
- Warren Hastings first Governor-General of Bengal, with supremacy of the Bengal Presidency over the other Presidencies. The Supreme Court established at Calcutta. Rohilla war; the Rohilla Chiefs defeated by the British. Annexation of Rohilkhand to Oudh. Clive committed suicide in England 1774
- The Nawab-Wazir of Oudh ceded Benares and Ghazipur. The Bombay Government occupied Salsette and Bassein. Battle of Arras. Nuncomar convicted and hanged for forgery, 5th August 1775
- The First Mahratta War 1775-82
- French correspondence with Mahrattas and Mysore 1777-78
- War with France in Europe 1778
- General Goddard's celebrated march across India 1778-79
- Repulse by Mahrattas of English advance on Poona. Convention of Wargaoon, January. League against English of Mahrattas, Mysore, and Nizam 1779
- Captain Popham captured Gwalior, 3rd August. Hyder Ali took Arcot and ravaged the Carnatic. Warren Hastings wounded Sir Philip Francis in a duel, 17th August 1780

England at war with Spain, Holland, France, and American Colonies.	
Sir Eyre Coote defeated Hyder at Porto Novo, 1st July. The British captured the Dutch ports of Pulicat and Sadras. Negapatam annexed to the British dominions. Insurrection at Benares . . .	1781
Final expedition of French against English in India . . .	1781-82
Indecisive naval battles between French under Suffrein and English under Hughes. Treaty of peace with Mahrattas at Salbai. Death of Hyder Ali. The French assisted Tipu Sultan, his son . . .	1782
Fox's India Bill rejected by Parliament. The captured French possessions restored to them by the treaty of Versailles . . .	1783
Peace with Tipu Sultan: the conquests on both sides restored by the treaty of Mangalore. Pitt's India Act established a Board of Control	1784
Warren Hastings left India. The Sikh power established in the Panjab. Mahdaji Scindia occupied Delhi . . .	1785
Lord Cornwallis Governor-General . . .	1786-93
Tipu sent embassies to the French and Turks . . .	1787
Warren Hastings impeached, 13th February, by the House of Commons before the House of Lords, for corruption, oppression, and maladministration . . .	1788
Tipu Sultan ravaged part of Travancore . . .	1789-90
Cannanore finally taken by the British . . .	1790
Lord Cornwallis led the British army against Tipu Sultan in person in the Third Mysore War . . .	1790-92
Lord Cornwallis took Bangalore, 21st March, joined by the Nizam and the Peshwa . . .	1791
The allies stormed and took Seringapatam. Tipu Sultan ceded half of his dominions to be divided between the British, the Nizam, and the Peshwa, and agreed to pay £3,000,000. Calicut came finally under the East India Company by the treaty of Seringapatam . . .	1792
Regular Courts established in Bengal. The revenue settlement of Lord Cornwallis in Bengal, by which the zamindars, who had been the revenue agents of the Mughal Emperor, were declared to be landowners, was made permanent. The great war with France begun. Pondicherry taken from the French for the third time. Act of Parliament to restrain war in India . . .	1793
Death of Mahdaji Scindia . . .	1794
Warren Hastings acquitted, 23rd April, after a trial lasting seven years. The Company granted him £4000 a year for life. The Nizam defeated by the Mahrattas at Kurdla . . .	1795
The Dutch settlements at the Cape, taken 1795, and in Ceylon . . .	1796
Shah Zaman, of Afghanistan, invaded the Panjab . . .	1797
Tipu's correspondence with French and Afghans . . .	1797-98
Expedition of Buonaparte to Egypt. Tipu sent an embassy to the Mauritius . . .	1798
Lord Mornington (later Marquis Wellesley) Governor-General . . .	1798-1805
Buonaparte, at Cairo, wrote a letter to Tipu. Seringapatam stormed and Tipu slain, 4th May. His dominions divided between the Nizam and the British . . .	1799
Rise of Maharaja Ranjit Singh in the Panjab . . .	1799-1839
The Nizam gave up his share of Mysore in consideration of British protection, by a subsidiary treaty . . .	1800
The Nawab of the Carnatic ceded Nellore, North and South Arcot, Trichinopoly, and Tinnevely. The Nawab-Wazir of Oudh ceded Rohilkhand and the Ganges Doab. Ceylon made a Crown Colony. Civil war among the Mahrattas and flight of the Peshwa . . .	1801

	DATE
Treaty of Bassein, by which the foreign relations of the Peshwa were to be supervised by the British; restoration of the Peshwa. Peace of Amiens in Europe	1802
Mahratta War. League of Scindia and the Raja of Nagpur. Battle of Assaye, 23rd September; General Wellesley (afterwards Duke of Wellington), with 4500 men, defeated 50,000 Mahrattas under Scindia and the Nagpur Raja: he again defeated the Mahrattas at Argaum, 28th November. Lord Lake defeated the Mahrattas at Aligarh, 4th September, Delhi, 11th September, and Laswari, 1st November; and captured Delhi and Agra, 18th October. Treaty of peace at Sirji Anjengaom, 30th December, with Scindia and the Nagpur Raja. Cession of the Northern districts, of what are now the United Provinces. The Mughal Emperor of Delhi became the pensioner of the British. Conquest of Cuttack. Renewal of war with France	1803
Advance of Colonel Monson into Holkar's territory, and disastrous retreat from 8th July to 30th August. Capture of Indore. Storm and capture of Dig, 23rd December. Holkar's attack on Delhi defeated	1804
Lord Lake abandoned the siege of Bharatpur. Holkar ceded all claims in Bundelkhand, and extensive territory elsewhere. The Marquess Cornwallis, Governor-General (2nd time) and Commander-in-Chief, 30th July, died at Ghazipur, 5th October	1805
Cape of Good Hope finally taken from the Dutch by Sir D. Baird. Mutiny of sepoys at Vellore suppressed by Colonel Gillespie	1806
Sir George Barlow, Governor-General . . . 10th October 1805 to 31st July 1807	1807
Napoleon contemplated a French-Russian expedition to India. French embassy to Persia	1807-8
Lord Minto, Governor-General	1807-13
Lord Minto despatched missions, to Persia (Malcolm), to Kabul (Elphinstone), to Lahore (Metcalfe)	1808
Conquest of the Mauritius (Ile de France) and Java	1810-11
The Indian trade thrown open by charter to all comers, and missionaries allowed to enter India	1813
Lord Moira (later Marquis of Hastings) Governor-General	1813-23
Middleton, first Bishop of Calcutta	1814-22
War declared against Nepal. The British repulsed	1814
General Ochterlony defeated the Gurkhas (Nepalese) at Malaun. End of the French war. British conquests in the East confirmed by treaty	1815
Treaty of Sagauli with the Nepalese. Large cession of territory from Nepal, including hill stations	1816
Operations against the Pindari bands of freebooters	1817-18
Mahratta War. Peshwa attacked the Poona Presidency. Battle of Kirkee, 5th November. Defeat of the Peshwa and capture of Poona. Outbreak at Nagpur. Battle of Sitabaldi, 26th to 27th November. Defeat of the Raja of Nagpur. Battle of Mahidpur, 21st December. Defeat of Holkar. Cession of Ajmer by Scindia	1817
Defence of Korigaum, 1st January, by 800 sepoys, with 10 British officers, against 25,000 Mahrattas. Holkar ceded territory. The Peshwa surrendered. His dominions, annexed, added to the Bombay Presidency	1818
The Nawab-Wazir of Oudh given the title of King	1819
Lord Amherst, Governor-General	1823-28
The first war with Burma	1824-26

DATES

Capture of Bharatpur, hitherto deemed impregnable, by Lord Combermere. Treaty of Yandabu. Cession by the Burmese of Assam, Arakan, and Tenasserim	1826
Lord William Bentinck, Governor-General and Commander-in-Chief	1828-35
Sati, or widow-burning, declared by law to be "culpable homicide," by Lord W. Bentinck	1829
Mysore made a Protected State	1831
Commercial treaties with the Panjab, 1832, and with Sind	1832 and 1834
Renewal of the East India Company's charter on condition that the Company abandoned its monopoly of the China trade and acknowledged the right of Europeans to reside in India and acquire land	1833
Annexation of Coorg. Macaulay, the first Legal Member of Council.	1834
Lord W. Bentinck, the first Governor-General of all India, left India, having abolished Sati, suppressed (with the aid of Sir W. Sleeman) Thagi, reformed the judicial administration, restored the use of the vernacular language in all courts, extended education, effected the revenue settlement of the (now) United Provinces (with the aid of Mr Robert M. Bird), given the natives a share in the government, restored the finances, and promoted steam communication <i>viâ</i> Suez. Efforts to stop female infanticide. Freedom of the Press established	1835
The Earl of Auckland Governor-General	1836-42
Lieutenant-Governorship of the North-West Provinces created	1836
The Shah of Persia besieged Herat	1837
Dost Muhammad, Amir of Afghanistan, received a Russian mission. Tripartite Treaty of British, Ranjit Singh, and Shah Shuja. War declared against Afghanistan by British. Slavery abolished, 1st August	1838
Kandahar and Ghazni captured, Kabul occupied, Shah Shuja reinstated as Amir. Death of Ranjit Singh, Maharaja of the Panjab. Capture of Aden	1839
Murder of Sir A. Burnes at Kabul, 2nd November; of Sir W. H. Macnaghten, 23rd December. Insurrection at Kabul	1841
Retreat of British army of 4500 men from Kabul, of whom one only, Dr Bryden, escaped to Jalalabad alive. Pollock forced the Khyber and joined Sale's garrison at Jalalabad. Nott, <i>viâ</i> Kandahar, and Pollock, joined at Kabul, the latter defeating the Afghans at Tezin, and rescuing Lady Sale and other Kabul prisoners. Return of the British army to India from Kabul. Murder of Shah Shuja at Kabul, and accession of Akbar Khan	1842
The Earl of Ellenborough, Governor-General	1842-44
Sir Charles Napier defeated the Sind Amirs at Miani, 17th February, and at Hyderabad, 24th March. Annexation of Sind. Defeat of Scindia's forces at Maharajpur and Panniar. Gwalior taken, 29th December	1843
Lord Ellenborough recalled	1844
Sir Henry (afterwards Lord) Hardinge, Governor-General	1844-48
First Sikh War. General Sir Hugh Gough fought an indecisive action at Mudki, 18th December. Assault on the Sikh entrenchments at Ferozshahr, 21st December. Danish possessions in India purchased	1845
Sir Harry Smith defeated the Sikhs at Aliwal, 26th January. Sir H. Gough fought a desperate battle at Sobraon, 10th February, which ended in the rout of the Sikh army. Jammu and Kashmir transferred to Maharaja Gulab Singh for £750,000. Treaty of Lahore, which was occupied	1846

- Sikh insurrection in the Panjab. Second Sikh War. Unsuccessful
siege of Multan. Annexation of Satara by lapse . . . 1848
- Earl (Marquis afterwards) of Dalhousie, Governor-General . . . 1848-56
- Multan besieged by General Whish, September 1848; stormed, 13th
January 1849. Sir H. Gough fought an indecisive action at
Chilianwala, 13th January; he defeated the Sikhs at Gujarat, 21st
February, after which they laid down their arms. Annexation of
the Panjab after the conquest, 29th March . . . 1849
- Second Burmese War. Annexation of Pegu after the war . . . 1852
- Annexation of Jhansi and Nagpur by lapse. The last Charter
Act: the Legislative Council of the Governor-General reformed.
First Indian Railway opened from Bombay to Thana, 16th
April . . . 1853
- Competitive system for civil appointments approved. Lower Bengal
made a Lieutenant-Governorship. Sir Frederick Halliday the
first Lieutenant-Governor . . . 1854
- Insurrection of the Santals in Bengal . . . 1855-56
- 7th February—Annexation of Oudh owing to persistent misrule.
Lord Dalhousie left India, having opened the first railway for
traffic, formed a Department of Public Works, introduced cheap
postage, constructed telegraphs, opened the Ganges Canal, and
established an Education Department with the three Universities
of Calcutta, Madras, and Bombay. 29th February—Lord
Canning, Governor-General. The General Service Enlistment
Act . . . 1856
- Jamsetjee Jeejeebhoy, a philanthropic Parsi, made a Baronet.
The Indian Mutiny. February—Mutinies at Barrackpore and Ber-
hampore. The sepoys refused to use the new cartridges. 3rd May—
Sir Henry Lawrence suppressed a mutiny of the 7th Oudh Irregulars
at Lucknow. At Meerut eighty-five sepoys refused to use even the
old cartridges and (9th May) were imprisoned in irons. Sunday,
10th May—Rising of the sepoys at Meerut; they released their
comrades from jail, burnt the cantonment, and made for Delhi.
11th May—The mutineers reached Delhi, murdered the Europeans,
and proclaimed the Mughal king, Bahadur Shah, Ruler of India.
30th May—Mutiny in the cantonment near Lucknow. 4th June
—Mutinies at Benares and Allahabad, and slaughter of Europeans.
5th June—Mutiny at Jhansi. Massacre of the Europeans who
had surrendered on a promise of their lives. Mutiny at Cawnpore.
6th June—Attack upon Sir Hugh Wheeler in the entrenchment at
Cawnpore. 8th June—Battle of Badli-ki-sarai, near Delhi.
Defeat of the rebels, and occupation of the Ridge. 11th June—
Arrival of Colonel Neill with the Madras Fusiliers at Allahabad.
23rd June—This being the hundredth anniversary of the Battle of
Plassey, the mutineers made a determined assault on the Ridge at
Delhi. 26th June—Capitulation of Sir H. Wheeler at Cawnpore on
a promise from the Nana Sahib that the lives of all would be spared.
27th June—Massacre of the garrison at Cawnpore by order of
the Nana. 2nd July—Investment of the Residency buildings at
Lucknow. Sir H. Lawrence mortally wounded by a shell. 7th
July—General Havelock advanced from Allahabad with 2000
men. 16th July—Murder of the British women and children at
Cawnpore by order of the Nana. 17th July—General Havelock
retook Cawnpore. 14th August—Arrival of General Nicholson's
column at the Ridge, Delhi. 6th September—Battering train arrived

at the Ridge. 14th to 20th September—Delhi stormed with a loss to the British of 1200 men. General Nicholson mortally wounded.	
25th September—Generals Havelock and Outram fought their way into Lucknow 25th to 26th September, but were unable to relieve it completely. Death of General Neill. Sir Colin Campbell relieved Lucknow, 17th November. Lucknow evacuated, 22nd November. Death of General Havelock, 24th November. General Windham driven into his entrenchments at Cawnpore, 27th November, by the Gwalior rebels, who plundered the city. Sir Colin Campbell defeated the Gwalior rebels, 6th December	1857
Sir Colin Campbell reconquered Lucknow, 19th March. Sir Hugh Rose (afterwards Lord Strathnairn) captured Jhansi, 3rd April, and Gwalior, 20th June. Loyalty of Dost Muhammad, Amir of Afghanistan, and Jang Bahadur, Prime Minister of Nepal, throughout the mutiny. 1st November—The Government of India transferred from the East India Company to the British Crown, represented by a Viceroy. Lord Canning the first Viceroy	1858
The Panjab made a Lieutenant-Governorship. Sir John Lawrence the first Lieutenant-Governor. (First) Indian Code of Civil Procedure passed	1859
The Income Tax imposed. Declaration to rulers of Native States granting adoption Sanads. Indian Penal Code enacted	1860
Severe famine in North-West Provinces through failure of the crops. Legislative Councils established (in 1862) in the three Presidencies under the Indian Councils Act of 1861. Creation of the Order of the Star of India. The Indian Civil Service Act and Indian High Courts Act passed by Parliament. (First) Code of Criminal Procedure passed in India	1861
The Earl of Elgin, Viceroy and Governor-General	1862-63
High Court established at Calcutta combining the Supreme and Sudder Courts	July 1862
The Umbleyala campaign on the North-West Frontier	1863
Sir John (afterwards Lord) Lawrence, Viceroy and Governor-General	1864-69
Terrific cyclone at Calcutta	5th October 1864
The Bhutan War, 1864-65. The Bhutan Dooars annexed	1865
The Orissa famine: deaths of a large proportion of the population of Orissa	1866
The Straits Settlements separated from India	1867
Samarkand taken by the Russians. Sher Ali, Amir of Afghanistan	1868
The Amir Sher Ali attended the Ambala Darbar	1869
Visit of the Duke of Edinburgh to India	1869-70
The Earl of Mayo, Viceroy and Governor-General	1869-72
The Lushai campaign	1871-72
Assassination of Lord Mayo, 8th February, while on a visit to the convict settlement in the Andaman Islands. Lord Napier of Merchistoun, Governor of Madras, officiated as Viceroy, February to May. Indian Contract Act and Indian Evidence Act passed	1872
Lord Northbrook, Viceroy and Governor-General	1872-76
The Russians under General Kauffmann took Khiva	1873
The East India Company formally dissolved from 1st January. Famine in Bihar. Government expenditure of £6,750,000	1874
Deposition of the Gaekwar of Baroda, after a judicial trial	1875
Visit of Prince of Wales (afterwards King Edward VII.) to India	9th November to 13th March 1875-76
Pacification of Baluchistan	1876

	DATES
Lord (afterwards Earl) Lytton, Viceroy and Governor-General .	1876-80
Famine in S. India. Government expenditure of £8,000,000.	
Increase of 5,000,000 deaths. British subscription of half a million sterling	1876-78
H.M. the Queen Victoria proclaimed Empress of India at Delhi, 1st January. Creation of the Order of the Indian Empire	1877
Sher Ali, Amir of Afghanistan, received a Russian mission, but refused to receive a British envoy. Three British columns moved on Afghanistan. Capture of Ali Masjid. General (afterwards Earl) Roberts stormed the Peiwar Kotal, 2nd December. Flight of Sher Ali to Turkestan, and accession of his son, Yakub Khan. Despatch of native troops to Malta	1878
Death of Amir Sher Ali, 21st February. Treaty of Gandamak, 26th May. Sir Louis Cavagnari received at Kabul as British representative in July, but murdered 3rd September. General Roberts advanced by the Kuram valley, carried the heights of Charasia, 6th October, took Sherpur, and entered Kabul, 9th October. Abdication of Amir Yakub Khan	1879
March of General Sir Donald Stewart from Kandahar to Kabul. Ayub Khan defeated General Burrows at Maiwand, 27th July. March of General Roberts with 10,000 men, 9th to 31st August, to the relief of Kandahar, 313 m. in twenty-two days. General Roberts completely routed Ayub Khan on 1st September. The British nominated Abdur Rahman as Amir, 10th August. The British forces returned to India	1880
The Marquis of Ripon, Viceroy and Governor-General	1880-84
Skobelev defeated the Tekke Turkomans and captured Geok Tepe	1881
Further advance of the Russians. Death of Skobelev. Lord Ripon extended local self-government with some powers of election. Abolition of customs duties on all articles except intoxicants and arms. A Contingent of the native army sent to Egypt	1882
A Bill proposing to "invest native magistrates in the interior with powers over European British subjects" gave rise to bitter race feelings. Compromise adopted by which Europeans are entitled to a jury of which at least one-half are to be of their own race	1883
Occupation of Merv and Sarakhs by the Russians. Boundary Commission sent to settle North-West Frontier of Afghanistan	1884-85
The Earl (afterwards Marquis) of Dufferin, Viceroy and Governor-General	1884-88
Conflict of a Russian force and Afghans at Panjdeh. The Amir Abdur Rahman met Lord Dufferin at Rawal Pindi. The Indian National Congress commenced its annual meetings. The fort of Gwalior restored to Maharaja Scindia	1885
King Thebaw, of Mandalay, having made overtures to France and refused to receive a British envoy, was deposed. Annexation of Upper Burma, 1st January. Delimitation of the Northern boundary of Afghanistan by an Anglo-Russian Commission	1886
The Jubilee of H.M. the Queen-Empress celebrated with great manifestations of native loyalty	16th February 1887
Formation of Imperial Service Troops in Native States	1888
Marquis of Lansdowne, Viceroy and Governor-General	1888-94
Completion of the Afghan Frontier Railway and Defences. Visit of H.R.H. the Duke of Clarence to India. Military expeditions sent against hill tribes	1889

	DATES
Chin and Lushai expeditions. Convention between Great Britain and China relating to Sikkim and Tibet	1890
Murder of British officers at Manipur, 24th March. Capture and execution of the rebel leaders. Visit of H.I.H. the Czarévitch (until 1917 the Czar of Russia) to India	1891
The Indian Councils Act introduced an elective element into the Supreme and Provincial Legislative Councils; their constitution and procedure changed. Lord Herschell's Indian Currency Committee	1892
The Mints closed to the free coinage of silver. The value of the rupee fixed, for Government purposes, at rs. 4d. Some compensation given to officials on account of the depreciation of the rupee	1893
Abolition of the Presidential Army commands, by an Act of 1893, came into force on 1st April. Visit of Sardar Nasrullah Khan, son of the Amir, to England. Final delimitation of the Pamir Boundary. Chitral campaign. Storming of the Malakand Pass and relief of the British force in Chitral. Re-imposition of import duties on cotton goods (27th December 1894)	1895
Plague broke out first at Bombay. The political boundaries of Afghanistan partly laid down	1896
Lord Welby's Royal Commission of Enquiry into Indian Expenditure	1896-97
Burma created a Lieutenant-Governorship. Legislative Councils created in the Panjab and Burma. Severe earthquake, 12th June, in Bengal and Assam	1897
Plague and famine. British subscription of more than half a million sterling. Rising of tribes in 1897 on the North-West Frontier. Punitive expeditions, the principal one against the Afridis in Tirah, lasting till the spring of 1898. Sir H. H. Fowler's Indian Currency Commission	1898
Lord (afterwards Earl) Curzon of Kedleston, Viceroy and Governor-General	1899-1904, 1904-5
Famine in the Central Provinces and the Panjab, and in the N. parts of Bombay. Indian troops sent to Pekin under General Sir A. Gaselee	1900
Deep regret in India at the death of H.M. the Queen-Empress Victoria. Letter of King Edward VII., dated 26th January, to his Indian subjects. Death of Amir Abdur Rahman, 3rd October, and succession of his son, Amir Habibullah Khan. Formation of the new Province of the North-West Frontier. Blockade of the Mahsud Waziris	1901
The old Provinces of the North-West Provinces renamed the United Provinces of Agra and Oudh. Recovery of the Indian Finances. Lord Kitchener, Commander-in-Chief in India. Tariff Act passed to countervail bounties on sugar	1902
The Indian Police Commission	1902-03
Coronation Darbar of H.M. King-Emperor Edward VII., held at Delhi on 1st January by Lord Curzon, in the presence of T.R.H. the Duke and Duchess of Connaught. The Berars attached to the Central Provinces. Visit of Lord Curzon to the Persian Gulf. Wide spread of the plague	1903
Viceroyalty of Lord Curzon extended by two years. Expeditionary force sent to Lhasa. Convention between Great Britain and Tibet, signed at Lhasa, 7th September. Mission to Kabul. Indian Universities Act	1904
Constitution of the Province of Eastern Bengal and Assam, 16th October. Change of status of the military member of	

DATES

- the Viceroy's Council. Creation of Army and Military Supply Departments. Railway Board established in India. Visit of King George V. and Queen Mary, as Prince and Princess of Wales, to India, 9th November to 19th March 1906. Severe plague continued. Resignation of Lord Curzon, 18th November . . . 1905
- The Earl of Minto, Viceroy and Governor-General, 17th November 1905-12
- Convention between Great Britain and China, 27th April. Resignation of the Lieutenant-Governor of Eastern Bengal and Assam, 19th August. Visit of Amir Habibullah Khan to India . . . 1906
- Unrest in Bengal marked by murderous outrages. Act for Prevention of Seditious Meetings. Famine in the United Provinces. Continuance of plague. Appointment of Lord Kitchener as Commander-in-Chief extended for two years. Convention between Great Britain and Russia . . . 1907
- The Explosive Substances Act, The Newspapers (incitement to offences) Act, Indian Criminal Law Amendment Act (for more speedy trial of certain offences), passed in India . . . 1908
- Post of military member of the Viceroy's Council abolished. Sir O'Moore Creagh appointed Commander-in-Chief in India. Lord Morley's Indian Councils Act, 1909, passed by Parliament. The enlarged Legislative Councils, of the Governor-General, and Provincial, under the Indian Councils Act, 1909, established 1909-10. Executive Council formed for Bengal . . . 1909
- Lord Hardinge of Penshurst, Viceroy and Governor-General, 23rd Nov. The Indian Press Act (to provide for the better control of the Press) . . . 1910
- The Indian Factories Act and the Prevention of Seditious Meetings Act passed. The Coronation Darbar held at Delhi by His Majesty George V.—The King-Emperor's Proclamation.—Announcement of the transfer of the capital of India from Calcutta to Delhi, of the creation of a Governorship for the Presidency of Bengal, of a Lieutenant-Governorship for Bihar, Chota Nagpur, and Orissa, of a Chief Commissionership for Assam, 12th December . . . 1911
- Visit of Their Majesties the King-Emperor George V. and Queen-Empress Mary to India . . . 2nd December 1911 to 10th January . . . 1912
- Lord Carmichael, Governor of Bengal. Executive Council formed for Bihar and Orissa. Lord Hardinge severely wounded by a bomb on the occasion of his ceremonial entry into Delhi as the new capital of India, 23rd December . . . 1912
- Lord Pentland, Governor of Madras . . . 1912
- The Royal Commission to enquire into the Indian Public Services (Lord Islington, Chairman) commenced their sittings in India. Lord Willingdon appointed Governor of Bombay. Funds collected in India for the Hindu University at Benares. A Royal Commission appointed (under Mr Austen Chamberlain) on Indian Currency and Finance published an interim report. Numerous Indian Credit Banks failed and were wound up. Considerable Indian demands for redress of grievances in South Africa. Sir Benjamin Robertson, Chief Commissioner of the Central Provinces, sent to represent the Government of India on the enquiry in South Africa . . . 1913
- The new Alexandra Dock opened at Bombay. Lord Crewe's Council of India Bill introduced in the House of Lords, and rejected after full debate. Sir Beauchamp Duff appointed Commander-in-Chief in India. On the outbreak of the European War on 4th August,

the Viceroy assured England of full support and loyalty from India. Universal outburst of loyalty; valuable assistance rendered by Princes and peoples of India. The German cruiser, *Emden*, sank British merchant ships in Bay of Bengal, and bombarded Madras, until caught off the Cocos Islands. Indian Expeditionary Forces, three complete Divisions (70,000 combatants) of British and Indian troops were despatched from India, to take part in the War in France, Egypt, East Africa, China and Mesopotamia. Territorial troops arrived in India from England. The first two V.Cs. conferred on Indian soldiers. The first All-India Conference of Indian Christians held in Calcutta

1914

During the War, India generally loyal and contented. The Viceroy visited the Persian Gulf, and went up to Basra. The House of Lords rejected the proposed Executive Council for the United Provinces of Agra and Oudh. The Government in India regulated the prices of corn, in the interest of the Indian people, by limiting the amount of export, and creating a State monopoly of the export. The prolonged trial at Lahore of sixty-one political criminals charged with conspiracy to overthrow British rule in India; twenty-four sentenced to death (many of the sentences commuted); twenty-seven to transportation for life. All German Missionaries in India deported or interned

1915

The Government of India Act, 1915 (consolidating all existing Statutes), and the Government of India (Amendment) Act, 1916 (amending certain enactments)

1915-16

Lord Chelmsford, Viceroy and Governor-General, in April. Contemplated abolition (after a transition period) of the system of Indian Indentured Labour announced. Fall of Kut-el-Amara in Mesopotamia, 29th April, after 143 days' siege. Death in June, between Karachi and Lahore, of a number of territorial soldiers recently arrived in India. Sir Charles Monro appointed Commander-in-Chief in India. In November the Mohmands raided into British territory, but were easily repulsed and scattered; first use of aeroplanes in Indian warfare

1916

Earl of Ronaldshay, late M.P., Governor of Bengal from March. Three representatives of India, Sir James Meston, Sir S. Sinha and the Maharaja of Bikanir deputed to England to attend the War and other Cabinet Meetings. Visit of the Right Hon. E. S. Montagu, Secretary of State for India, to India

1917

GLOSSARY OF THE PRINCIPAL NATIVE TERMS USED IN THIS BOOK.¹

[A. signifies Arabic; H. Hindústání or Hindi; K. Kanarese; Mal. Malayálam; M. Mahráttí; My. Malay; P. Persian; S. Sanskrit; Sin. Sinhalese; Tel. Telugu; Tur. Turkish; T. Tamil.]

AMÍR (Ameer), A. "commander," a title of Princes and nobles, as the Amirs of Sind, or of Afghanistan.

ÁNÁ (Anna), H. the 16th part of a rupee.

ANIKUT, I. weir, dam (*annai kutta*).

ANJUMAN, P. assemblage, society, institute.

ĀRĀMA, S. and Sin., a pleasure-garden or park.

BABŪL, H. a thorny mimosa (the *Acacia arabica* tree), in N. India named the Kikar.

BAHÁDŪR, P. "brave," "chivalric," a title of honour among Muhammadans.

BANA, Sin. reading of the sacred books in public.

BAND, H. an embankment or dyke—commonly Bund.

BANDAR, P. a port or harbour.

BANYAN-TREE, S. the Indian Fig-tree (*Ficus Indica*, or *Ficus Bengalensis*, L.) which has aerial roots growing down into the ground from its horizontal branches.

BĀOLÍ, H. a well with steps, galleries, and chambers.

BARAHDARI, H. (twelve doors) a mansion.

BÁZĀR, P. a market or market-place; a street of shops.

BEGAM (Begum), Tur. a lady of rank; a Queen or Princess.

BEL, H. a fruit-tree (*Agle marmelos*).

BHÁTĀ (Batta), H. additional allowance to soldiers employed on foreign duty.

BUNGALOW, H. and M. (bangla), a thatched or tiled house of one storey; the name usually applied to the houses of the English in India, and to the rest-houses for travellers built by Government on the public roads.

CASTE, class; sect; corruption of the Portuguese *casta* or race.

CATAMARAN, T. *kattu*, "to bind," *maram*, "a tree," a log-raft on which the natives of Madras paddle through the surf.

CHABUTRA, H. a raised platform, usually of stone or brick; terrace.

CHADAR, H. (Chádar) sheet worn by men and women.

CHAITYA, S. a Budsdhist chapel or church; primarily a heap or tumulus; also a place of sacrifice or religious worship; any building of the nature of a religious monument (Fergusson, *Ind. Arch.*).

CHAKRA, S. a wheel; the wheel of the law.

CHAUKIDAR (Chokidar), H. a watchman, peon, village watchman.

CHAURI, H. a fly-whisk; a mark of rank.

CHĀWADĪ, Tel. a native rest-house for travellers, English corruption *Choultry*.

CHHATRI, H. (Chhattar) umbrella; insignia of rank; a monumental structure or pavilion erected in honour of a person of rank.

CHITAL, H. the spotted deer (*Axis maculatus*), gregarious, and common in many parts of India.

¹ Terms relating to religious matters, festivals, etc., which are explained in the Introduction, are generally not included here.

- CHUNAM, T. an English corruption of H. *chūná*, lime, a plaster or mortar sometimes made of shells of a remarkable whiteness and brilliance.
- CHUR, an alluvial formation, as an island in, or on the bank of, a river.
- COMPOUND, an enclosure, probably a corruption of the Malay word *Kampung*.
- CRORE (Karor), H. 100 lakhs or 10 millions.
- DAGOPA, DAGOBA, S. a Sinhalese word from Pali *dhatugabbha* and S. *dhatugarbha*=relic-receptacle; strictly applicable to the dome of the *stupa* (q.v.) (Fergusson).
- DAK, H. Post. Dak-Bungalow (or Musáfari Bungalow), a rest-house for travellers.
- DÁKGHÁRI, H. stage-coach, drawn by ponies, for one or two travellers.
- DARBÁR (Durbar), P. a royal court; an audience or levee; a hall.
- DARGAH, place of burial of a Muhammadan saint.
- DARWAZA, P. gateway, door.
- DEODAR, the *Cedrus deodara* of the Himalaya: from *deva-daru*, the "wood of the gods."
- DHARMSÁLÁ, H. and M. (*dharma*, "justice," "piety," and *sálá*, "a hall"), a place of accommodation for travellers and pilgrims.
- DHARNA, S. to sit at a door until payment is extorted (an offence under the Penal Code).
- DHOLI, H. *Dhooli* (properly *doli*), a swinging cot or litter suspended from a pole carried by bearers.
- DIWÁN, P. "a royal court," "a minister," especially the chief financial minister.
- DIWAN-I-AM, DIWAN-I-KHAS, P. hall of public, private, audience.
- DOAB, the country between two rivers.
- DWARPÁL, H. a door-keeper, commonly sculptured at sides of doors in Buddhist shrines and Hindu temples.
- FAKÍR, A. a religious Muhammadan who has taken a vow of poverty; a poor man; also inaccurately applied to Hindu devotees and ascetics.
- FARMAN, P. a royal order or grant.
- GADDI, H. seat; royal seat; throne of a Hindu Prince.
- GALA, Sin. (giri, S.), hill, rock.
- GAMA, Sin. (grama, S.), village.
- GANÁ, H. Buddhist celestial dwarf.
- GARUDA, a fabulous creature, half man, half eagle.
- GHARA, H. an earthen water-pot or jar.
- GHÁT (Ghaut), S. *ghatta*, "a landing-place," "steps on a river-side"; a mountain pass; any narrow passage.
- GIRJA (Port), church: from Portug. *igreja*.
- GOPURAM, H. the gate-pyramid of a pagoda; the principal feature of the quadrangular enclosure of a temple.
- GUMBAZ, P. a cupola; a dome.
- GUSAIN, H. Hindu monk or devotee.
- HAMMÁL, A. a bearer of a *palki*; in Bombay, an orderly or house-bearer.
- HAMMAM, P. bath.
- HARÍM (Haram), P. a sanctuary; ladies' apartments.
- HAUZ, A. cistern, tank, reservoir.
- HAVILDAR, H. "one holding an office of trust"; an officer in native regiments corresponding to a sergeant.
- HUKKA (Hooka), A. a native pipe.
- HUZÚR, A. the royal presence; a respectful term applied to high officials.
- IDGAH, P. the open enclosure where the Id prayers are offered.
- IMAMBARA, P. a building to which the Shias carry the *tasias* or biers in the *muharram*, often the tomb of the founder.
- ISHWAR or ISWAR, S. God, Lord.

- JĀGĪR, P. a tenure by which the public revenues of an estate or district were granted to an individual (jagirdar), with powers to collect them, and formerly to administer the general affairs of the estate.
- JAM'ADĀR, A. a native officer next to a Šúbadar, and corresponding to lieutenant.
- JHATKA, H. covered pony cart in S. India.
- JHIL, H. pool, lake, swamp.
- JOGI, S. a Hindu devotee, as Fakir is a Muhammadan.
- JOHAR (Jauhar), H. sacrifice or immolation practised by Rajputs when about to be captured. Scholars will recall the occurrence of such sacrifices at Saguntum and Numantia.
- KABR, A. a tomb.
- KACHĒRĪ, H., or KACHAHRĪ, commonly Cutcherry, a court or office for public business.
- KALĪMA, A. (in full, Kalimat-ul-shahadat, the word of testimony) the Muhammadan profession of faith (Introduction, p. lviii).
- KANDA, Sin. mountain.
- KANKAR, H. nodular limestone, with which roads in N. India are metalled.
- KARBALA, A. designation of cemetery or place where *tazias* are buried, derived from the city on the Euphrates where the Imām Ali is buried.
- KHĀN, A. a Muhammadan title of respectability answering to "Esquire."
- KHANSAMA, P. literally "master of the household gear" = butler, or house-steward. In Anglo-Indian households in Upper India it is the title of the chief table-servant and provider, always a Muhammadan. In N. India and Kashmir, it means the cook. In the Madras Presidency and S. India, the title Khansama is not used; "butler" is general, and he is seldom a Muhammadan.
- KHIDMATGAR, A., P., H. the "service-doer," always applied to a Muhammadan table-servant.
- KIBLA, A. the place to which Muhammadans look when praying, in the direction of the temple of Mecca.
- KILA, KILADAR, P. fort, commandant of fort.
- KIMKHWAB (Kincob), P., H. gold brocade.
- KOTHI, H. residence, house, mansion.
- KOTWAL, KOTWALI, P. police officer, police station.
- KULAM, T. tank.
- ḲULĪ (Cooly), T. and Tur. a day labourer; porter at railway stations and elsewhere.
- KUND, S. a pit, hollow, pool, well, small tank.
- LĀKH (Lac), S. the number 100,000. By customary use "a lakh" means "a lakh of rupees."
- LĀT, H. a stone monolithic pillar=*stambha*, common to all styles of Indian architecture.
- LINGAM, S. symbol of Siva as the God of reproduction.
- MAIDAN, P. plain, open space, field of battle.
- MAKBARA, (P. from Kabr) grave of a saint.
- MAMLATDAR, subordinate revenue collector in Bombay.
- MAN (Maund), H. a weight, varying in different parts of India. In Bombay it is 25 lb.; in Bengal, since 1883, 82 lb.
- MANDAPAM, S. an open pavilion or porch in front of a temple; also Mantapam.
- MASJID, A. mosque (place of prostration, *sajda*). Jāmi Masjid congregational mosque. One prayer in a Jāmi Masjid is equivalent to 500 elsewhere, and one at Mecca to 100,000 elsewhere.
- MASNAD, P. cushion, throne of a Muhammadan Prince.
- MASULA, T. a boat sewed together, used for crossing the surf at Madras.

MATH, H. Hindu monastery, of which a Mahant is Abbot.

MELA, H. a fair.

MIHRAB, A. an arch; the recess in the wall of a mosque on the side nearest Mecca, to which Muhamadans turn at prayer—usually termed Kibla in India.

MIMBAR, P. the pulpit in a mosque; the preacher stands on the middle step of the three while delivering his sermon (Khutba).

MONSOON, A. a corruption of the A. *mausam*, "a season"; applied now to the periodical rains in India during the S.W. Monsoon, from June to September.

MUFASSAL (often written Mofussil), separate, detailed, particular: commonly meaning "the interior of the country," as distinguished from the towns.

MUNSHÍ (Moonshi), A. a writer; a secretary; a teacher of languages.

NAIK, S. an officer in native armies corresponding to a corporal; an ancient title.

NANDI, S. bull; vehicle of Siva, often carved in kneeling attitude facing Saivite temples.

NAUBAT KHANA, NAKKAR KHANA, A. the chamber over a gateway, where a band is stationed.

NAUCH (Nach), S. a dance; an exhibition of dancing-girls.

NÁWÁB, A. this word means *lit.* "deputies," being the plural of *nā'ib*, "a deputy." It is now a title of Governors and other high officials.

NIZÁM, A. an arranger; an administrator; a title of the Prince whose capital is Hyderabad, in the Deccan.

NULLA, H. properly Nala, "water-course," or "depression."

PAGODA, P. an Anglican corruption of the P. word *but-kada*, "an idol temple" in S. India; also a coin formerly in use = $3\frac{1}{2}$ rupees, called by the natives *hūn*, but deriving the former name from its showing a temple on one face.

PALANKEEN (PALANQUIN), H. an Anglican corruption of the word *pālki*, a means of conveyance, of the shape of a long box with sliding sides, in which persons are carried on men's shoulders; but little in use nowadays.

PÁLEGÁR (Polygar), T. Tel. a shareholder; a landed proprietor. A title of persons in the Madras Presidency who correspond to zamindars in other parts of India.

PÁN, S. the leaf of the betel creeper. Pan-supari is areca nut rolled in betel leaf with a little shell-lime for chewing.

PANSALA, Sin. a leaf-hut; monk's dwelling.

PARDA, P., H. a curtain, especially one that screens women; *pardanashin* = one sitting behind a curtain—*i.e.*, secluded.

PATEL, S. the headman of a village, invested with some magisterial and revenue functions.

PEEPUL (Pipal) S., H. one of the great fig-trees of India (*Ficus religiosa*).

PEONS, from the Portuguese *peao*, Spanish *peon*, "footman."

PESHWÁ, P. the Brahman Prime Ministers of the Rájás of Sátará, who afterwards became the supreme Chiefs of the Mahrátta nation.

PHINS, T. the Toda name for the stone circles on the Nilgiri Hills.

PICE, H. a corruption of the word *paisá*, a copper coin, of which 64 go to a rupee, and 4 to the anna, and which itself contains 3 pie.

PILIMAGE, Sin. image-house.

PINDÁRI, M. (Pendhara), organised bodies of raiders and robbers.

PINJRAPOL, H. (*pinjra*, a cage), an animal hospital, mostly kept up by the Jains; animal infirmary.

PINKAMA, Sin. merit-act; entertainment.

PIR, P. old; a Muhamadan saint.

PIRIVEN, Sin. series of monks' cells.

PRAKARA, a great corridor.

- PURA, S. and Sin. (PURAM, T.), a city.
 RÁJÁ, S. a Hindu King or Prince.
 RANÍ, S. the wife of a Rájá; a Queen or Princess.
 RATH, S. a chariot formerly, now a superior class of cart.
 RATHS or RÁTHAS, the name of certain rock-cut monolithic Dravidian temples at Mamallapuram, near Madras.
 RISÁLDAR, A. a native captain of a troop of horse.
 ROZA (Rauza), A. a tomb in an enclosure, originally the garden at Medina adjoining the chamber (hujra) in which Muhammad was buried.
 RYOT, A. an Anglican corruption of the A. word *ráiyat*, a subject, a peasant.
 SADR, A. (Sadar, Sudder), top, chief, principal.
 SADR' ADÁLAT, A. formerly the Supreme Court of Justice in India.
 SHÁHIB, A. lord; a title applied to an English gentleman in India.
 SHAIYAD, A. a descendant from the family of Muhammad.
 SAMADH, H. cenotaph of a Hindu; also self-immolation.
 SANDAL, A. and S. the fragrant wood of the *Santalum album*, L.
 SANGAM, S. junction of two or more rivers—commonly a sacred place of pilgrimage.
 SANGHARAMA, a group of apartments for a community of monks, a monastery.
 SARÁÍ, P. a rest-house for travellers; a caravanserai.
 SARHI, H. (commonly Sari), a sheet worn by Hindu women.
 SATÍ (Suttee), S. a chaste wife, especially one burnt with her deceased husband; the burning of such a wife.
 SHÁH, P. a King; a title usually applied to the King of Persia.
 SHAIKH, A. old, respected; a class or rank of Muhammadans.
 SHANKH, S. a conch shell, large specimens of which are blown as horns by the Hindús during religious ceremonies.
 SHIKÁR; SHIKÁRI, P. game, shooting; native gamekeeper.
 SHOLA, T. a patch of jungle; a wooded dell.
 SIKRA, S. (Sikhara) spire or finial of Hindu temple; pyramidal; many-storeyed; always surmounting the cell of the image.
 SINHASAN, S. a lion-seat (*singh*, lion), Hindu throne.
 SIPÁHÍ, H. (Sepoy), a native soldier, one of a *sipáh* or army.
 STAMBHA=LĀT (*q.v.*).
 STUPA (or TOPE), a relic-shrine; a monument containing relics; or a tower commemorative of an event or sacred spot (Fergusson).
 ŠUBADÁR, A. Governor of a Province; a native infantry officer corresponding to a captain.
 TAHSIL, P. a division of a Zilla, equivalent to Taluk.
 TAHSILDÁR, P. a native sub-collector of revenue, who may also be a magistrate.
 TAIKHANA (P. *tah-khana*, lower house), underground room for retreat in summer, P. *sardáb*.
 TÁJ, P. a crown.
 TALE, Sin. a tank.
 TALUK, A. or more properly *ta'alluka*, a tract, or division of a district.
 TANK, a reservoir, an artificial pond or lake, made by excavation or by damming (a word of both Indian and European origin).
 TAPPÁL, H. in Bombay the post; delivery of letters; a relay of horses.
 TARA, S.; TIRTHA, S.; TOTA, S.; TUREI, T.; a crossing; a ford; shore or harbour; landing-place.
 TATTI, M. matting; a mat-shade.
 TREPPA KULAM (*South India*), a tank surrounded by steps with usually a temple in the centre.
 THANA, a police-station; THANADAR, the officer in charge of it.
 TIFFIN, luncheon, a word of hybrid and uncertain origin.
 TIRTH, S. place of Hindu pilgrimage, see TARA.

- TIRTHANKAR, S. Jain saint.
 TONGA, H. a light, small, and low-seated two-wheeled vehicle drawn by ponies, often used to the hill-stations and in them.
 TOTA, see TARA.
 TRIMURTI, the three-faced bust of Siva in the characters of the Hindu Trinity.
 TRIPULIA, H. a gateway, or approach with three arches.
 TUGHRA, A. an ornamental character of writing, used for royal signatures and titles.
 TULSI, S. the *Ocimum sanctum*, the sacred Basil plant, venerated by the Hindus.
 TURBI, see TARA.
 VAHANA, S. a sacred vehicle of a Hindu god.
 VIHÁRA, S. a Buddhist monastery, or an apartment or hall in a monastery or cave: in Ceylon, a Buddhist temple; a meeting-hall of monks; later temples, and resembling churches (Fergusson).
 VILA, Sin. (VILEI, T.), a pond.
 VIMANA, S. the principal part, the actual temple itself; has a pyramidal roof, and contains the cell for the image or emblem of the god.
 WAPI or VAPI, S. and Pali, a tank.
 WÁZIR, A. a prime minister.
 WEWA, Sin. a tank.
 ZAMÍNDÁR, P. a landed proprietor, a landlord.
 ZANANA, P. women's quarters—commonly Zenana.
 ZIARAT, A. pilgrimage, and hence a burial-place, a place of Muhammadan pilgrimage.
 ZIL'A (Zilla), A. a portion, division, or district; hence, the area or tract constituting the jurisdiction of the District Officer—i.e., a Magistrate and Collector, or a Deputy Commissioner.

NOTE.

THE FOLLOWING ABBREVIATIONS ARE USED IN THIS BOOK.

<i>A.H.</i>	{ Year of Hijra (the Hegira).	<i>pop.</i>	Population.
<i>As.</i>	Annas.	<i>R.</i>	Refreshment Room.
<i>B.I.S.N.</i>	{ British India Steam Navigation Co.	<i>R.C.</i>	Roman Catholic.
<i>Cants.</i>	Cantonments.	<i>R.H.</i>	Rest-house.
<i>C.M.S.</i>	{ Church Missionary Society.	<i>Rs.</i>	Rupees.
<i>D.B.</i>	{ Dak Bungalow, a rest-house for travellers.	<i>S.</i>	South.
<i>E.</i>	East.	<i>U.P.</i>	United Provinces.
<i>E.I. Company</i>	East India Company.	<i>W.</i>	West.
<i>ft.</i>	Feet.	<i>W. J. Canal</i>	Western Jumna Canal.
<i>G.T. Road</i> ...	Grand Trunk Road.	<i>yds.</i>	Yards.
<i>in.</i>	Inch.	<i>B.B. & C.I.</i>	{ Bombay, Baroda, and Central India Railway.
<i>fn., junc.</i> ...	Junction.	<i>B.N.W.R.</i>	{ Bengal and North-Western Railway.
<i>m.</i>	Mile.	<i>E.B.R.</i>	Eastern Bengal Railway.
<i>N.</i>	North.	<i>E.I.R.</i>	East Indian Railway.
<i>N.I.</i>	Native Infantry.	<i>G.I.P.R.</i>	{ Great Indian Peninsular Railway.
<i>p.</i>	Page.	<i>O.R.R.</i>	{ Oudh and Rohilkhand Railway.
<i>P. & O.</i>	{ Peninsular and Oriental Steam Navigation Co.	<i>S.I.R.</i>	South Indian Railway.

* This sign in the text appended to a name indicates that further information relating to the subject is to be found in the *Index and Directory* at the end.

Comparative Table of Steamship Services to India.

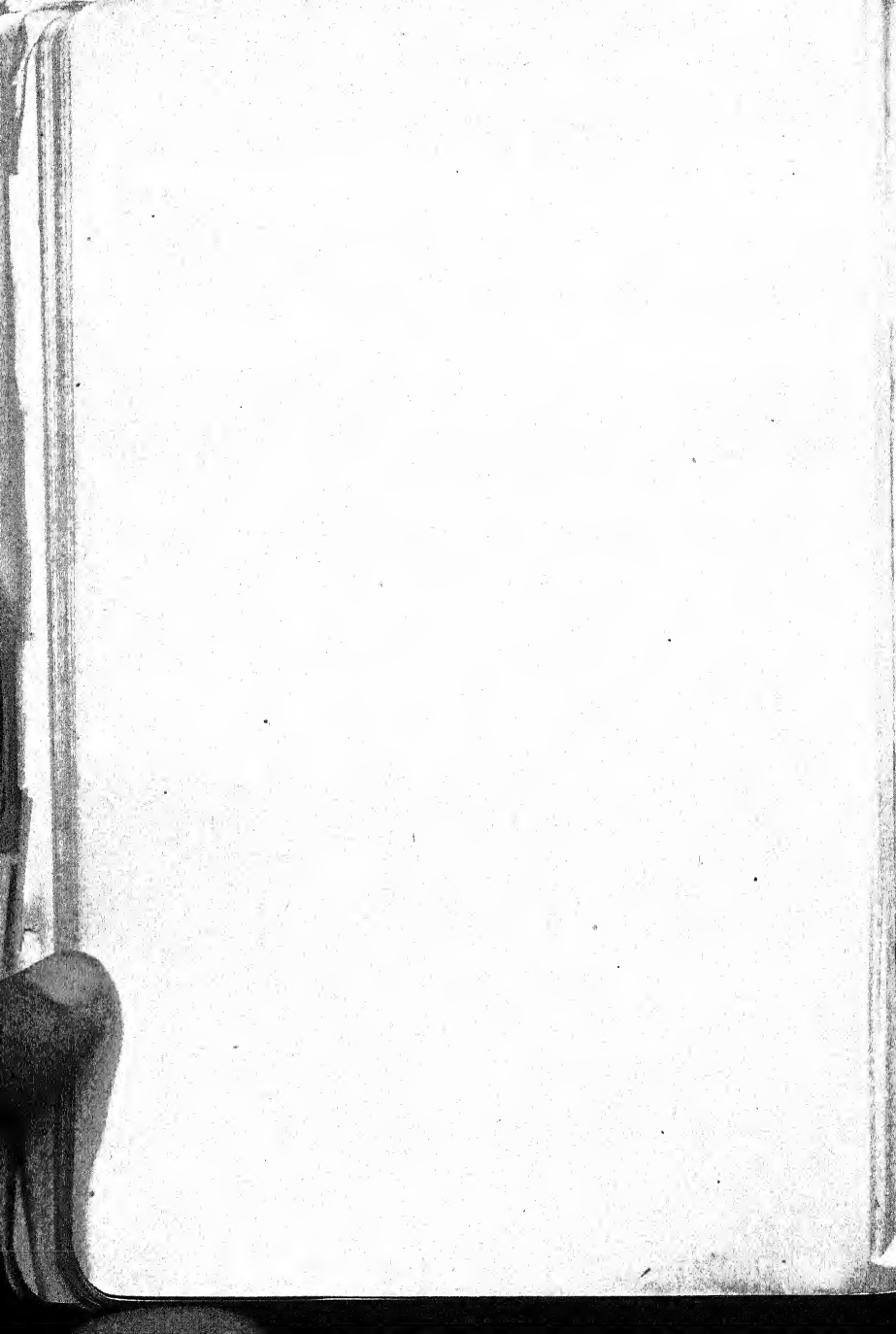
(See footnote, p. clxxv.)

Line and Date of Sailings.	Tonnage of Steamers.	Length of Voyage.	Fares.		Extra Charges, etc.
			1st Class.	2nd Class.	
To Bombay and Karachi.					
<i>P. & O.</i> — From London every Friday. From Marseilles do. From Brindisi, Sunday night. From London <i>via</i> Brindisi, Friday evening (P. & O. Express).	8—13,000	21 14 11½ 14	£48—60 £44—56 £56 £65, 10/5	£38—44 £36—42	Passengers proceed by B.I.S.N. steamer from Bombay to Karachi.
<i>B.I.S.N. Co.</i> — From London, alternate Saturdays. From Marseilles, alternate Saturdays.	7—9,000	23 17	£46 £44	£34 £32	
<i>Anchor Line</i> , from Liverpool fortnightly.	5—6,700	22	£40		
<i>Ellerman's City and Hall Lines</i> , from Liverpool twice monthly.	6—9,000	23	£40	£30	
<i>Societa Nazionale di Servizi Marittimi</i> , from Genoa every 23 days	4,500	16-17	£50, 16/3	£39, 4/3	Usual stay at Bombay 6 days. 3rd class, £19, 2/3.
To Calcutta.					
<i>P. & O.</i> —Every second Saturday from London.		32	£46—50	£36—39	<i>Intermediate.</i>
<i>B.I.S.N. Co.</i> — From London, alternate Saturdays. From Marseilles, alternate Saturdays.	7—9,000	34 27 27-30	£50 £48 £40	£39 £37 £30	
<i>Ellerman's City Line</i> from Liverpool, about 3 times each month.					
<i>Messageries Maritimes</i> , from Marseilles— To Calcutta, transhipment at Colombo, every 23 days.	4—7,000	23			
To Pondicherry, transhipment at Colombo, every 28 days.		20	£33	£51, 16/	3rd class, £29, 12/.
To Madras, by rail from Pondicherry, every 28 days.		21			
To Madras.					
<i>B.I.S.N. Co.</i> — From London, alternate Saturdays. From Marseilles, alternate Saturdays.	7—9,000	31 24	£46 £44	£36 £44	
To Colombo.					
<i>Orient Line</i> — From London, every second From Toulon, every second Thursday, <i>via</i> Naples and Taranto.	8—13,000	22 16	£42—60 £40—56	£34—44 £32—42	
<i>P. & O.</i> — From London, every second From Marseilles, every second Friday.		25	{ £46, 50, 60 £44, 48, 56	{ £38—44 £36—42	Through rates to Southern India.

Comparative Table of Steamship Services to India—continued.

Line and Date of Sailings.	Tonnage of Steamers.	Length of Voyage.	Fares.		Extra Charges, etc.
			1st Class.	2nd Class.	
To Colombo—continued.		days.			
<i>R.I.S.N. Co.</i> —					
From London, alternate Saturdays.	7—9,000	27	£42	£34	
From Marseilles, alternate Saturdays.		20	£40	£32	
<i>Bibby Line</i> —					
From Liverpool, alternate Thursdays.	8,760 to 8,500	25	£42		One class only.
From Marseilles, alternate Fridays.		17	£40		
<i>Messageries Maritimes</i> —Every 14 days from Marseilles.	6—7,000 1 steamer 13,000	16	£75, 8/	£50	3rd class, £29, 4/.
To Rangoon.					
<i>Bibby Line</i> —					
From Liverpool, alternate Thursdays.		30	£50		
From Marseilles, alternate Fridays.		22	£45		
<i>Henderson Line</i> , from Liverpool, alternate Thursdays.	4—6,000	32	£37, 10/		

The passage rates shown above have been compiled afresh (October 1917). The frequency of the various services is at the moment much interrupted, owing to the employment of steamers by the Ministry of Shipping. Such changes of fares as are indicated here are likely to be maintained, with one or two exceptions; *i.e.*, the *Messageries Maritimes*, which has increased its rates by 50 per cent. *pro tem*.



I.—BOMBAY AND THE ENVIRONS *

[For Directory, including list of Hotels, etc., see Index.]

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History.—There is little doubt that the W. coast of India had trade relations with the Assyrian, Persian, and Roman empires; but the direct connection of modern Europe with it dates only from 1498, when Vasco da Gama sailed round the Cape of Good Hope to Calicut. Twelve years afterwards Albuquerque conquered Goa, and twenty-four years later again Sultan Bahadur Shah, of Gujarat, ceded Bassein, Salsette, and Bombay to the Portuguese. In 1608 Captain William Hawkins, of the Third Separate Voyage, landed at Surat, and in 1611-12 a permanent factory was established there. In 1626 the Portuguese buildings in Bombay were captured and destroyed by a combined English and Dutch force. In 1661 Bombay was ceded to England as part of the dowry of Catherine of Braganza, but the actual possession of it was not transferred till 1665, and on the 23rd September 1668 it was made over to the East India Company by King Charles II. for an annual rent of £10 in gold. One of the terms of the transfer was that the English should support the Portuguese in India against the Dutch, who were rapidly supplanting them everywhere. The name of the place

was then supposed to be a corruption of Bon Bahia or Fair Bay. Its true derivation is uncertain: possibly from Maha Ammanai, or "great mother," a tutelary deity of the island; or perhaps from "Maha-amba-ai," Amba being a name of the goddess Parvati; or, again, perhaps from the goddess Mumba, the patron deity of the pre-Christian Kolis, the earliest inhabitants of the island. Mumba, again, is thought to be another form of Amba, another name of Bhawani, the consort of Siva. Maha Amba, the great Amba, would, by Kolis and other illiterate persons, be pronounced as Mamba or Mumba. In 1674 Bombay possessed a castle which mounted 120 pieces of various ordnance, and had a garrison of 300 English, 400 Portuguese, and 500 militia. In 1687 the seat of Government was finally transferred from Surat to Bombay. The first four Governors held Bombay for the Crown. After the transfer to the East India Company, for the next nineteen years (1668-87), except for occasional visits and during three years (1672-75) of the rule of Governor Gerald Aungier, the real founder of Bombay, the Governors of Bombay spent almost the whole

of their time at Surat, of which factory they were Presidents. During their time Bombay was administered by an officer styled Deputy-Governor; this title fell into disuse. In 1708 it became the real trading headquarters of the Company on the W. coast, Surat being no longer a safe place; and before 1720 the town, which had grown up outside the castle, contained a population of 50,000, and was enclosed by a wall. At that time it already possessed a mint, and a bank was founded shortly afterwards, and the port flourished considerably from the encouragement given to the China trade. About the middle of the century the town was re fortified, and soon came into prominence in connection with the suppression, in 1756, of the pirates, by Admiral Watson and Colonel Clive, a position which was ultimately confirmed by the results of the struggle of the Company with the Mahrattas, who, twenty years before, had taken Bassein and Salsette from the Portuguese. On the Portuguese preparing to recover the latter in 1774, it was seized by the Company, and, with Broach, was retained after the Peace of 1776;¹ and though both were surrendered by the disgraceful Convention of Wargaoon (1779), the fulfilment of that was saved by the arrival of Colonel Goddard with the Bengal troops and, after Bassein had been captured in 1781, the whole of these acquisitions remained with the British by the Treaty of Salbai in 1782. From that time the development of the port and city has proceeded steadily apace, and it is not necessary to follow it in detail. The city was visited by General Wellesley (the Duke of Wellington) in 1804, and to his instance was due the first road practicable for artillery up the Bore Ghat and

to Poona; and it seems certain that it must have been visited by Lord Nelson while a midshipman, in 1775, as the *Seahorse*, on which he made his first cruise, was in the Persian Gulf and at Bombay in that year.² The framework of the present system of administration of the Presidency and its Capital was shaped by Mountstuart Elphinstone in 1819-27. The Chamber of Commerce was established in 1836, the Bishopric in 1837, and the Bombay Bank in 1840; while the University was created in 1857, and the Legislative Council in 1862, and the Municipal Authority, formed in 1872, was converted into a Corporation in 1888. The Port Trust, which now administers an income of £500,000 a-year (£546,000 in 1910-11), was created in 1873, and the Bombay City Improvement Trust in 1898. The mail service with England was undertaken by the P. & O. Company in 1855; the G.I.P. Railway had been opened as far as Thana two years previously, and was extended up the Ghats in 1863, and in the same year the Bombay Baroda Railway, which had been opened in 1860, was extended to Ahmadabad. During the American Civil War immense wealth was poured into Bombay in connection with the export of cotton, and over-speculation at this period was followed by a severe financial collapse.

It was at this date that the old fort walls were at last removed. The castle which guarded the

¹ In Lord Nelson's original letter of thanks to the East India Company for the gift of £10,000 voted to him after the Battle of the Nile, a letter dated 3rd July 1797, and written on board the *Foudroyant* at Naples, he says, "Having in my younger days served in the East Indies, I am no stranger to the munificence of the Honble. Company." This letter may be seen in the Library of the India Office.

² See Mr. J. Douglas's vols. on Bombay and W. India. 1885. *The Gazetteer of Bombay*, by Mr S. M. Edwards, I.C.S., 1910, gives the fullest information about the island and city.

¹ It will interest travellers by the Suez Canal to be reminded that the first English ship from India to Suez reached that port in 1776.

centre of its sea front yet stands, and Fort George, which stood at the Northern end of this front, still gives its name to the European General Hospital. On the S. side the defences followed the line of Rampart Row from the Apollo Gate to the S.W. corner, and then that of Esplanade Road, passing the Church Gate and Hornby Road, to the N.W. corner and the Bazar Gate, whence they turned E. to Fort George. Outside the W. defences was a fine esplanade, and in the centre of the fort was the green on the site of which Elphinstone Circle now stands. The four most remarkable developments in Bombay during the last half of the 19th century have been (1) the reclamation of land; (2) the construction of docks; (3) the development of cotton mills (the first founded in 1857), of which there are now in Bombay 83, employing 180,000 hands; and (4) the erection of a splendid series of public buildings, many due, as will be seen below, to the munificent charity of private persons. The Corporation consists of seventy-two members, half elected for different wards of the city, twenty elected by the Chamber of Commerce, the University, and the Justices of the Peace, and sixteen nominated by Government. Inside the Corporation, which is a deliberate body, is an executive committee, termed the Standing Committee, consisting of twelve members, eight elected by the Corporation and four appointed by Government. The Municipal Commissioner, appointed by Government, exercises supreme executive authority in all Municipal matters. The annual income of the Corporation amounts to 139 lakhs, derived principally from a general tax (52 lakhs), a water tax (23 lakhs), conservancy tax (15 lakhs), and town duties (20 lakhs). During the last half century the value of the trade of the port has increased from 16 crores of rupees

till it reached the record figure of 202 crores in 1913, but, owing to the War, it declined to 140½ crores in 1915-16: and the number of steamers entering the port decreased from 2549 to 2239, the great majority being ships under the English flag, besides 43,129 sailing vessels. The principal articles of trade are: Imports—cotton, piece-goods, metals, machinery, silk manufactures, railway plant, kerosene oil, sugar, and timber; and Exports—coal, cotton, grain, oil, seeds, tea, hides raw wool, piece-goods, twist, yarns, and manganese ore. The value of the Foreign trade in 1915-16 was: Imports (including treasure) £36,034,000: Exports £37,475,000; while the value of the Coasting trade was £20,140,000.

After 1896 the export trade received some check from the prevalence of plague and the consequent imposition of quarantine against Bombay by all foreign ports, but has since recovered. The number of deaths from plague (1896-1915) has been 186,583. The expenditure on account of plague in Bombay city has been over £540,000, in addition to which over £4,600,000 have been spent by the City Improvement Trust in ameliorating conditions favourable to plague. The pest is usually worst in the early hot weather. The number of attacks has considerably decreased of late years.

According to the census of 1911, the population of Bombay is 979,445. The population was classified in 1911 as below:—

Hindus	664,042
Muhammadans	179,346
Parsis	50,931
Jains	20,460
Europeans and Eurasians	16,082
Native Christians	41,273
Jews	6,597

The growth of the population has been somewhat as follows:

Latter half of 18th century, 150,000; early in 19th century, 200,000; 1815, 240,000; 1849, 550,000; 1872, 644,000; 1881, 773,196; 1891, 821,764; 1901, 776,006; 1906, 959,537.

The City Improvement Trust was created by a special Statute in 1898 for the purpose of improving the sanitation of the city and developing new residential areas. It consists of fourteen members, of whom four are elected by the Corporation, one by the Chamber of Commerce, one by the Port Trust, one by the Mill-owners' Association and the remaining seven, including the Chairman, being nominated by Government. The capital expended by the Trust on the acquisition and development of their estates has now reached nearly 4 millions sterling, and over 2 millions are yet to be spent for the completion of the sanctioned programme. The estates aggregate about 1525 acres, including 435 acres fully developed as residential areas, of which nearly 200 acres have been disposed of on building leases for 99, or 999 years. In 1915-16 the Trust's net revenue from their estates was 22 lakhs, exclusive of 10 lakhs contribution received from the Municipality. The year's profits amounted to 8 lakhs, after payment of 24 lakhs interest and sinking fund charges on capital borrowed to date.

The Empress Victoria Memorial has taken the form of an Institution and School for the Blind in the Tardeo quarter.

The principal Governors of Bombay since the early days of Sir George Oxenden (1668-1669) and Mr Gerald Aungier have been Sir John Child (1681-1690), Mr William Hornby (1771-1784), Mr Jonathan Duncan (1795-1811), the Hon. Mountstuart Elphinstone (1819-1827), Sir John Malcolm (1827-1830), Sir George Russell Clerk (1847-1848 and 1860-1862),

Lord Elphinstone (1853-1860), Sir Bartle Frere (1862-1867), and in recent times Sir Richard Temple (1877-1880), Lord Reay (1885-1890), Lord Harris (1890-1895), and Lord Northcote (1900-1903). The late Governor, Sir George Sydenham Clarke, R.E., G.C.M.G., G.C.I.E., created Lord Sydenham, retired in March 1913; Lord Willingdon succeeded to the Governorship.

The Island of Bombay is situated in lat. $18^{\circ} 53' 45''$, long. $72^{\circ} 52'$. It is one of a group of twelve which were at one time separated from the mainland and from one another by very narrow channels, some of which have now been filled up, the principal being Bassein, Dravi, Salsette, Trombay (in which the hill called the Neat's Tongue, 1000 ft. high, is a conspicuous mark), Bombay, and Elephanta.

Bombay Island is $11\frac{1}{2}$ m. long from the S. extremity of Colaba to Sion Causeway, over which the G.I.P. Railway passes to the island of Salsette, and from 3 to 4 m. broad in that portion which lies to the N. of the Esplanade. The area is 22.48 sq. m., to which about $1\frac{1}{4}$ sq. m. will be added by the reclamations now in progress. "In the beauty of its scenery," says the *Traveller's Companion*, "as well as in the commercial advantages of its position, Bombay is unsurpassed by any of the cities in the East."

Climate.—The average temperature of Bombay is 79.2° F. It is neither so hot in summer nor so cold in winter as many places in the interior. The coolest months are from November till March. The S.W. monsoon begins about the second week in June, and the rains continue till the end of September. The average rainfall is 70.30 in.

Bombay Harbour. — As the harbour is approached and entered the scene is very picturesque. To the W. the shore is crowded with buildings, some of them, as the Colaba Church, the Tower of the University, and that of the Municipal Buildings, very lofty and well proportioned. To the N. and E. are numerous islands, and on the mainland hills rising to an altitude of from 1000 to 2000 ft. Pre-eminent amongst these is the remarkable hill of Bawa Malang, otherwise called Mallangarh, on the top of which is an enormous mass of rock with perpendicular sides, crowded with a fort, now in ruins. (See p. 461.)

The main defences of the harbour, remodelled and armed with the newest and heaviest guns, consist of batteries on the islands in the harbour, in addition to which there are three large batteries on the mainland. The South Island fort is called the *Oyster Rock*; that on the *Middle Ground* shoal is in the middle of the anchorage; the third defence is on *Cross Island*, at the N. end of the anchorage, the higher part of which has been cut down and armed with a battery.

Landing.—Pending completion of the Alexandra Dock Passenger Traffic Berth and Railway Station, passengers are landed at the Ballard Pier in launches. The heavy luggage is sent to the Customs House at the pier, and passengers can take only hand articles with them in the launch. On the completion of the Passenger Railway Station mail steamers will lie alongside the landing wharf, and special trains will convey passengers up-country direct from the steamer. No luggage is now examined on board the steamer. The hotel authorities and various agents send representatives to meet passengers on landing, and it will be found most convenient to entrust the baggage

to one of them, furnishing him with a detailed list of the boxes. Customs forms, to be filled up with the contents of large packages, and with all articles liable to Customs duty, are usually provided on board the steamer. Recent tariff legislation has abolished Customs dues on all articles of personal use,¹ so the system is now much simpler; the articles which give trouble are firearms only. If these have not been in India before, or have not been in India for a year, a high *ad valorem* duty is levied on them, and they cannot be removed from the Custom House until the duty is paid, or a certificate is given that a full year has not elapsed since the owner left India. The P. & O. steamers, after landing the mail and passengers, proceed up the harbour to the docks. Special limited expresses leave Bombay for Calcutta (37 hrs.), Delhi (24½ hrs.), and Madras (26 hrs.), soon after the arrival of the steamer. Places in these trains should be secured in London. Bombay to Delhi, 957 m.; to Lahore, 1267 m.; to Lucknow, 885 m.

Travellers who have not been in the East before will be struck by the picturesqueness of the scene on landing in Bombay. The quaint native craft at the quay; the crowds of people dressed in the most brilliant and varied costumes; the Hindus of different castes; the Muhammandans, Jews, and Parsis, with a sprinkling from other nationalities; the gaily-painted bullock-carts; and other sights of equal novelty, combine to make a lasting impression on the stranger's mind.

General Description of Bombay and its Suburbs.—The road from

¹ The general duty was 5 per cent. *ad valorem*, but has been altered. Arms are subject to a special duty of Rs.50 per rifle or gun, Rs.30 per barrel for these, and Rs.15 per pistol.

the Ballard Pier enters the circuit of the Old Fort of Bombay just above the ancient Castle. From this point Mint Road leads N. to the Victoria Station and onwards to the main part of the native city—Marine Street and Apollo Street lead S. to Rampart Row along the S. side of the Fort, and the open space W. of the Apollo Bandar, the landing-place so well known to former generations of visitors to India—and Church Gate Street leads W. to Esplanade Road, which follows the landward line of the former defences, and to the Back Bay on the Western side of the Island, beyond which most of the unofficial residences of the more wealthy classes are situated. Between the shore and Esplanade Road, which runs parallel to it, is the splendid range of Public Offices. S. of the open space, near which all the principal hotels are situated, extends the promontory of Colaba; and Northwards, along the course of the Back Bay, Queen's Road leads to Malabar Hill, which bends round the N.W. side of the bay, and is continued to the N. by Cumballa Hill; from both of these beautiful views of the Back Bay and of the sea are obtained. E. of the two hills and of the Northern part of Queen's Road lies the native city, with the quarters of Byculla and Mazagon along the north side of it. Above Byculla is the principal location of the Bombay mills; in Mazagon are the P. & O. Docks, below which, and E. of the main city, lie the Prince's and Victoria Docks. To the S. of the native city, and between it and the N.W. side of the Fort, are also a number of fine new buildings, including many places of business, though most of the houses connected with the trade of the port are still situated inside the Old Fort.

PUBLIC OFFICES.

The impressive Government

buildings already mentioned succeed one another in the following order: from S. to N., the Prince of Wales' Museum and the College of Science S. of the Secretariat; then come the Government Secretariat, close to Watson's Hotel on the Esplanade, University Hall, Library, and Clock Tower, High Court, Public Works' Secretariat, Telegraph Office, and New Post Office. There is a building to the N.E. of the Telegraph Office which is used for the accommodation of the *employés* of the Telegraph Department.

The Presidential Secretariat is 443 ft. long, with two wings 81 ft. long. In the first floor are the Council Hall, 50 ft. long, Committee Rooms, Private Rooms for the Governor and Members of Council, and the Offices of the Revenue Department. The second floor contains the Offices of the Judicial and Military Departments. The style is Venetian Gothic, and the designer was Colonel Wilkins, R.E. The carving is by native artists. The staircase is lighted by the great window, 90 ft. high, over which rises the tower to 170 ft. At the entrance are the arms of Sir Bartle Frere (who was Governor when the plans were formulated for erecting Public Buildings, and to whom Bombay owes many of its improvements), and Sir S. Fitzgerald.

University Hall.—This fine building, in the French Decorated style of the 15th century, is 104 ft. long, 44 ft. broad, and 63 ft. high to the apex of the groined ceiling, with an apse separated from the Hall by a grand arch, and a gallery, 8 ft. broad, round three sides. The painted-glass windows have an excellent effect. The Hall, designed by Sir Gilbert Scott, R.A., is called after Sir Cowasjee Jehangir Readymoney, who contributed Rs.100,600 towards the cost of

erection. It was completed in 1874.

The **University Library and Clock Tower** form a grand pile, designed by Sir Gilbert Scott in the style of 14th century Gothic. The Library is a long, low room, adorned with carving, and the Great University or Rajabai Tower on the W. side forms part of it, and is from its height (260 ft.) the most conspicuous building in Bombay. It was built at the expense of Mr Premchand Raichand, in memory of his mother, Rajabai, and cost Rs.300,000. He also gave Rs.100,000 for the Library; and these sums, with accumulations, more than sufficed to complete the two buildings. The Tower is divided into six storeys, and is surmounted by an octagonal lantern spire, with figures in niches at the angles. There are twenty-four figures in all upon the tower, representing the castes of W. India. The first floor forms part of the upper room of the Library, and the second contains a study for the Registrar. There is an opening several feet square in the centre of each floor, so that one can look up 115 ft. to the ceiling of the Dial Room. The fourth floor contains the great clock. Under the dials outside are four small galleries, with stone balustrades. From the top of the tower there is a fine view of Bombay. On the E. are the harbour, fringed with islands, Mody Bay, and the Fort; and to the W. are Malabar Hill and Back Bay; and to the S. Colaba Point.

The Courts of Justice.— This immense building, 562 ft. long, with a tower 175 ft. high, was designed by General J. A. Fuller, R.E.; it is said to have cost £100,000, and was opened in 1879. The style is Early English. The principal entrance is under a large arched porch in the W. façade, on either side of which is an octagon

tower 120 ft. high, with pinnacles of white Porbandar stone, and surmounted by statues of Justice and Mercy. The main staircase is on the E. side, and is approached by a noble groined corridor in Porbandar stone, which runs through the building. The offices of the High Court are on the first and third upper floors. The Appellate and Original Courts are on the second floor. The Criminal Court is in the centre of the building, above the main corridor, and has a carved teak gallery for the public running round three sides. The ceiling is of dark polished teak in panels, with a carved centre-piece. The floor is Italian mosaic.

Next to the Courts of Justice, and separated from the Post-Office by a broad road which leads E. to the Fort and W. to the Church Gate Station of the B.B. and C.I. Railway, is the **Public Works' Secretariat**, with a façade 288 ft. long, the central part having six storeys.

The Railway, Irrigation, and other Engineering Departments are accommodated in this office.

On the S. side of the arm of the road leading to the W. are the Statues of two former Governors of Bombay, Sir Richard Temple and Lord Reay. The latter faces the fine office of the B.B. and C.I. Railway, which has a façade 280 ft. long and a tower 160 ft. high.

The **Old General Post-Office** has three floors, and is 242 ft. long, with wings on the N. side. It was designed in the mediæval style by Mr Trubshawe. It now serves as a post-office for the Fort Area only. The **New General Post-Office** is a fine building near the Victoria Terminus Station; it was designed by Mr J. Begg, and its erection was supervised by Mr G. Wittet.

The **Telegraph Office**, in Romanesque style, has a façade 182 ft. long. The facing of it and of the Post-Office is of coursed rubble

stone from Kurla, in Salsette, and the columns are of blue basalt.

North of the Telegraph Office at the junction of the Mayo and Esplanade Roads, which flank the above buildings on either side, is the Statue of Queen Victoria, by Noble, which is an object of constant interest to the natives. It is of white marble, and cost Rs.182,443, of which the large sum of Rs.165,000 was given by H.H. the late Khande Rao Gaekwar, of Baroda. The statue was unveiled by Lord Northbrook in 1872. Her Majesty is represented seated. The Royal Arms are in front of the pedestal, and in the centre of the canopy is the Star of India, and, above, the Rose of England and Lotus of India, with the mottoes "God and my Right," and "Heaven's Light our Guide," inscribed in four languages.

Returning S. from this point to the Frere Fountain, and following Church Gate Street into the area of the Fort, Elphinstone Circle, occupying the site of the old Green, is reached. In Esplanade Road, running S. from the fountain, and in Hornby Road, running N., and together marking the western limits of the Fort, are the principal shops in Bombay and the principal places of business which travellers are likely to visit. On the N. side of Church Gate Street is the office of the *Bombay Gazette*, and, farther back, that of the Chamber of Commerce, and on the S. side is the Cathedral of St Thomas. This was built as a garrison church in 1718, and was consecrated in 1816, and made a cathedral on the establishment of the See of Bombay in 1833, on which occasion the low belfry was converted into a high tower. It is simple in plan, and a mixture of the classical and Gothic in style. The chancel, added 1865, is a satisfactory specimen of modern Early English. Among the monuments is one by Bacon to Jonathan

Duncan, Governor for sixteen years. It represents him receiving the blessings of young Hindus with reference to his successful efforts in suppressing infanticide in certain districts near Benares, and afterwards in Kathiawar, through the zealous and able agency of Colonel Walker. There are also monuments to Captain G. N. Hardinge, R.N., who died in 1808 in a brilliant engagement, when he took the frigate *La Piedmontiase*; to Col. Burr, who commanded at the battle of Kirkee (5th November 1817); and to Major Pottinger, who distinguished himself in the defence of Herat (November 1837 to September 1838). One of the chalices was the gift of Gerald Aungier in 1675. The fountain in front of the Cathedral was erected by Sir Cowasjee Jehangir Ready-money, at a cost of Rs.7000.

The Elphinstone Circle is surrounded by handsome buildings and at the E. side opens on to the Town Hall; in the middle is a well-kept garden with statues of Lord Cornwallis and the Marquis Wellesley. From the centre of the S. side, on which the Bank of Bengal stands, Bank Street leads to the Bank of Bombay.

The Town Hall, designed by Col. T. Cowper, was opened in 1835, and cost about £60,000, by far the larger portion being defrayed by the E.I. Company. The building has a colonnade in front, and the façade is 260 ft. long. The pillars in front, and the external character of the edifice, are Doric; the interior is Corinthian. On the ground floor are the Medical Board offices, the office of the Military Auditor-General, and some of the weightier curiosities of the Asiatic Society. In the upper storey is the Grand Assembly Room, 100 ft. square, in which public meetings and balls are held; the Assembly Room of the

Bombay Asiatic Society; and the **Library** of this Society, founded by Sir James Mackintosh, containing about 100,000 volumes. The fine organ was presented by Sir A. Sassoon. The Levee Rooms of the Governor and the Commander-in-Chief, the Council Room, etc., are no longer used for their original purposes. The place of honour in the Grand Assembly Room is occupied by a statue of the distinguished Governor Mountstuart Elphinstone, executed by Chantrey, as were also those of Sir J. Malcolm and Sir C. Forbes. At the head of the staircase, on one side, is a fine statue of Lord Elphinstone, the Governor during the Mutiny, and on the other side is a statue of Sir Bartle Frere, an excellent likeness. Between the circular flights of stairs is the statue of Sir Jamsetjee Jeejeebhoy.

The Council Room contains pictures by Mr Wales, of Baji Rao II., Peshwa (whose adopted son, Nana Dhundu Pant, will be ever infamous as the author of the massacre at Cawnpore); of Baji Rao's celebrated minister, Nana Farnavis; and of Mahdaji Sindhia. In the Library of the Asiatic Society, instituted in 1804 for the investigation and encouragement of Oriental Arts, Sciences, and Literature, are busts of Sir James Carnac (by Chantrey) and Sir J. Mackintosh. The Geographical Room contains pictures of Sir A. Burnes, and of Sir J. Malcolm and Captain Ross, the two first Presidents of the Geographical Society; also a very fine collection of maps. These two Societies are now amalgamated.

The **Mint** is close to the Town Hall, but farther back, having a tank in front of it. It is a plain building, with an Ionic portico, designed by Major J. Hawkins, and completed in 1829. Authority was granted to the Company by the Crown to establish a mint

so early as 1676. Forty specimens of false coins are exhibited, one of which has been a good coin, but the silver has been scooped out of the centre and lead substituted.

N. of the mint, at the E. end of the Ballard Road, which leads to the Ballard Pier (p. 6), are the imposing **Offices of the Port Trust**. At the junction of the W. end of Ballard Road with Frere Road, leading to the N. past St George's General Hospital, is the Ruttonjee Mooljee Fountain.

Immediately behind the Town Hall are the remains of the **Castle** of the Old Fort, now used as an Arsenal. Only the walls facing the harbour and a portion of the wall to the N. now remain. There is a flagstaff here from which signals are made to ships, and also a clock tower, where a time signal-ball, connected by an electric wire with the Observatory at Colaba, falls at 1 P.M.

In the Arsenal, besides the usual warlike materials, harness, tents, and other such necessities for army equipment, is also an interesting collection of ancient arms and old native weapons of various descriptions. The **Custom House** is a large, ugly, old building, a little to the S. of the Town Hall. There were some old buildings converted into godowns. The present building was erected in 1714. A new Custom House will be erected on the newly-reclaimed ground near Ballard Pier.

The **Dockyard**, originally constructed in 1736, extends hence to the Apollo Gate, with a sea-face of nearly 700 yds. and an area of about 200 acres. It was here that his Majesty King Edward landed on 8th November 1875. There are five graving docks, three of which together make one large dock 648 ft. long, the other two graving docks making a single dock 582 ft. long. There are also four building slips opposite the Apollo Pier and on the S.E. side

of the enclosure. The dockyard is lighted by electricity, so that work can be carried on by night if necessary. Bombay is the only important place near the open sea in India where the rise of the tide is sufficient to permit docks on a large scale. The highest spring tides reach to 17 ft., but the usual height is 14 ft. In the dockyard four generations of a Parsi family of the name of Lowji gained much renown during the 18th century, and built a number of British men-of-war.

From the dockyard Custom House Street leads past the Great Western Hotel, once the High Court building, and St Andrew's Church, built in 1818, to the open space S. of Rampart Row, W., marking the Southern side of the Old Fort. On the left here is the fine building of the Royal Alfred Sailors' Home, with accommodation for 100 inmates. The sculpture in the gable, representing Neptune with nymphs and sea-horses, was executed by Mr Bolton of Cheltenham. His late Highness Khande Rao Gaekwar gave Rs.200,000 towards the cost of the building to commemorate the Duke of Edinburgh's visit, and the foundation-stone was laid in 1870 by the Duke. Opposite the Home is the New Prince of Wales Museum of W. India. A bronze statue of His Majesty, King George V. (the gift of Sir Sassoon J. David), flanks this new Museum on this side, as that of King Edward (p. 12) flanks the site on the other side.

Beyond this Apollo Bandar Road leads E. from the Wellington Fountain to the Apollo Bandar Pier, officially known as the Wellington Pier, passing between the Esplanade Annexe and the Yacht Club on the left hand, and the Bowen Church, Sardar's Mansions, and Yacht Club Chambers on the right. The Club has a charming terrace-garden on the sea-front. On either side of the

head of the Colaba Causeway, running S. from the fountain, are the Y.M.C. Institute, the Hotel Majestic, and the Apollo Hotel, and a little farther S. is the new Tata Hotel, known as the Taj Mahal, on the sea-shore. The Causeway leads past Cotton Green, the Sassoon Dock (650 ft. long, and the first wet dock made in India), and the B.B. and C.I. Railway terminal station to Colaba, formerly a separate island, with St John's Church, the European Barracks, the Connaught Hall, and the Observatory. The Church, erected as a memorial of the first Afghan War, and consecrated in 1858, consists of nave and aisles 138 ft. long, with a chancel 50 ft. long, and a tower and spire 198 ft. high, conspicuous for some distance at sea. The effect on entering is good, owing to the length and height of the building, the simplicity of the architecture, and the "dim religious light" diffused through the stained-glass windows. The roof is of teak. The illuminated metal screen, light and elegantly designed, is surmounted by a gilt cross. About $\frac{1}{4}$ th of the cost of the spire was contributed by Mr Cowasjee Jehangir in 1864, a striking instance of Parsi liberality and of good feeling between Parsis and Europeans.

At the W. end of the N. aisle is a triple window, erected to the memory of General David Barr.

The "memorial marbles" are of alternate colours of white, red, yellow, and blue; and beneath them runs the following inscription, painted on a blue ground:—

This Church was built in Memory of the Officers whose names are written above, and of the Non-Commissioned Officers and Private Soldiers, too many to be so recorded, who fell, mindful of their duty, by sickness or by the sword, in the Campaigns of Sind and Afghanistan, A.D. 1838-1843.

At the extremity of the promontory are the Old Lighthouse, and a well-kept European Cemetery.

The present lighthouse is on Prong Island, $\frac{1}{2}$ m. S. of Colaba Point, with which it is connected by a ridge of rock exposed at low tides; it is 150 ft. high, and the light which flashes every 10 secs. is visible 18 m. off at sea.

It is under consideration to make a great reclamation along the Back Bay from Colaba up to the Marine Lines, providing a large area for a new European residential quarter, a park, cantonment, and Government House.

Returning to the Wellington Fountain, the road along the W. side of the open ground leads past a fine block of buildings, consisting of the new Museum just completed, a College of Science, the Elphinstone College, the Sassoon Institute, the Army and Navy Stores, and the Esplanade Hotel. Opposite the last is the equestrian statue of King Edward as Prince of Wales, by Sir Edgar Boehm, presented to the city by Sir A. Sassoon at a cost of £12,500.

It is intended that the memorial of the King Emperor shall take the form of a large General Hospital in the Northern part of the city, a Convalescent Home, and a Consumptive Sanatorium in the Ghats.

The Prince of Wales Museum of Western India.—This fine group of buildings, the foundation-stone of which was laid by H.R.H., then Prince of Wales, on 11th November 1905, on the occasion of his visit to India, occupies an island site at the Southern end of Esplanade Road. The scheme consists of three units, arranged round three sides of a quadrangle, the central block containing the art and archaeological department flanked on one side by the Natural History Museum and on the other by the Industries section. The lower floors of the central block are occupied by archaeological

exhibits and the upper floors contain the picture galleries. In 1914, when nearing completion, the building was converted into a War Hospital for Indian troops, which purpose it served admirably. The style of the structure is based on the Indian work of the 15th and 16th centuries in the Presidency, and the materials used are the blue and yellow basalt found in the vicinity of Bombay. The buildings were designed and carried out under the supervision of Mr G. Wittet, F.R.I.B.A., Architect to the Government of Bombay.

The Royal Institute of Science.—This important group of buildings owes its inception to Lord Sydenham, formerly Governor of Bombay, who laid the foundation-stone in 1911, and to the generosity of Sir Jacob Sassoon, Sir Cowasji Jehangir, Sir Currimbhoy Ebrahim, and Sir Vasanji Tricumji Mulji, who furnished contributions for the erection of the various units. The scheme consists of a College of Science occupying a three-storey block fronting Mayo Road, a science library, a public hall at the corner of Mayo Road and Esplanade Road, and a block of examination schools facing Esplanade Road. The building, which is Renaissance in character, is constructed of yellow basalt stone, obtained from quarries in the vicinity of Bombay. The architect was Mr G. Wittet, F.R.I.B.A.

The Elphinstone College, removed from Byculla in 1890, now occupies a large building in the Romanesque Transition style, which cost $7\frac{1}{2}$ lakhs of rupees. It is called after Sir Cowasjee Jehangir Readymoney, in recognition of his having given 2 lakhs of rupees for the purpose of building the original institution. The Elphinstone Institution was founded as a memorial

to the Hon. Mountstuart Elphinstone, the Governor of Bombay. In 1856 it was divided into a High School (see p. 15), and this College for the higher education of natives, who contributed upwards of 2 lakhs to endow professorships in English, and the Arts, Sciences, and Literature of Europe. The sum accumulated to about $4\frac{1}{2}$ lakhs, and Government augments the interest on this by an annual grant-in-aid of Rs.22,000. In 1862 Sir Alexander Grant, Bart., was Principal of the College, and some distinguished scholars have filled Professorships, as, for instance, Mirza Hairat, who translated Malcolm's *History of Persia* into Persian. In the library is a portrait of Elphinstone by Sir T. Lawrence. The State Record Office and Patent Office occupy the W. wing of the College. Amongst the records are preserved the oldest document relating to the Indian Empire, a letter from Surat (1630), and the letter of the Duke of Wellington announcing the victory at Assaye.

The Mechanics' or Sassoon Institute was founded originally in 1847, but refounded and renamed by David Sassoon and his son Sir Albert in 1870, and cost £15,000. Lectures are delivered and prize medals awarded. Life-members pay Rs.150, and members Rs.6 per quarter. In the entrance hall is a statue of Mr David Sassoon, by Woolner. There is also a good library.

From here Esplanade Road, with the Bombay Club on its W. side beyond the University Gardens, leads to Church Gate Street and Hornby Road. On the W. side of the entrance to the latter are the lofty Oriental Buildings, and a little beyond them on the same side of the road are the fine new Chartered Bank and Standard Buildings, while a little back in Outram Road is the Cathedral High School for boys. On the

right is the lofty building of the Jamsetjee Jeejeebhoy Institute, founded in 1849 by Sir Jamsetjee Jeejeebhoy, who, with Lady Avabai, his wife, set apart for the purpose 3 lakhs of rupees and 25 shares in the Bank of Bengal, to which the Parsi Panchayat added 35 shares more. The Government of India are the trustees, and pay interest at 6 per cent. on the 3 lakhs, and the capital of the Institution now amounts to 12 lakhs. The income is divided into 400 shares, of which 180 go for the Boys' and Girls' Schools in Bombay, 70 for those in Surat, and 150 for charities for the poor. Farther N. rise two great architectural piles, one on either hand—the Terminus Station and Offices of the G.I.P. Railway to the E., and the Municipal Offices on the W. Between them, on a circular garden plot, is a statue, by Brock, of the late Sir Dinshaw Petit, first Baronet.

The Victoria Station is elaborately ornamented with sculpture and surmounted by a large central dome. The architect was F. W. Stevens, C.I.E.; the style is Italian Gothic, with certain Oriental modifications in the domes. It cost the Railway Company £300,000, and was completed in 1888. It is one of the handsomest buildings in Bombay and finest railway stations in India or any country, with the most excellent and convenient arrangements in every respect. S. of it is the fine large structure of the New General Post-Office in the Bijapur style of architecture (p. 490). S.E. of the railway station, in a well-laid-out garden, is St George's General Hospital for Europeans, with 140 beds; it has a convalescent home at Khandala (Route 26).

The Municipal Buildings were also designed by Mr Stevens, and were opened in 1893. The Oriental feeling introduced into the

Gothic architecture has a pleasing effect. The tower, 255 ft. high, and surmounted by a masonry dome, can be seen from all parts of Bombay. The central gable terminates in a statue 13 ft. high, representing "Urbs prima in Indis." The grand staircase is also crowned by an imposing dome.

Opposite these buildings Waudby Road leads S.W. to the Queen's Statue, passing the Gaiety and Novelty Theatres, the Scotch Free Church, the Masonic Hall, and the Alexandra School for Girls, founded by Mr Maneckjee Cursetjee, to the E. of it, and the open space of the Maidan or General Parade Ground and the Bombay Gymkhana Club on the W. At the corner of the Maidan, opposite the Municipal Buildings, is a statue of the late Mr Jamshedji Tata, flanked by allegorical figures.

From the Victoria Railway Station, Hornby Road continues N. up to the Crawford Market and the main residential quarters of the native city, passing on the left the new *Times of India* Office, the Islamia School, the Church of the Holy Trinity, and the School of Art; while from the station to the N.W. runs Cruikshank Road in front of the Municipal Offices, and past the Police Courts, the Alibless and Cama Hospitals, St Xavier's College, and the Elphinstone High School. On Carnac Road, which joins these two roads and forms the third side of a triangle with them, is the St Xavier's High School and the Gokaldas Tejpal Native General Hospital. The new Improvement Trust road, which forms the first portion of the Eastern Avenue, leaves Carnac Road near the Crawford Market.

The Anjuman-i-Islam School was erected by the co-operation of Government, which gave the site, valued at Rs.158,000, with a money-grant of Rs.38,000, the

Muhammadans themselves subscribing Rs.160,000, of which Rs.50,000 were set apart as an endowment. The building was opened by Lord Harris in 1893, and the erection of it marks an epoch in the history of the Muhammadan community. The building, which is of most pleasing appearance, and has a tower 125 ft. high, was designed by Mr J. Willcocks, of the Public Works Department.

The Sir Jamsetjee Jeejeebhoy School of Art, called after that distinguished Parsi gentleman, who contributed Rs.100,000 towards it, was first opened for pupils in 1857. In 1877 the present handsome building was erected for it. Excellent drawings and designs are made here, as well as good pottery, arms, artistic work in silver and copper, and decorative carving in wood and stone. The buildings in Western India owe much of their beauty to students of this institution. The latest additions to it are the Sir George Clarke Studios and Technical Laboratories, which include the Art Pottery Works, where some beautiful designs, purely Indian in form and ornament, have been carried out.

The Gokaldas Tejpal Hospital, for natives, can contain 150 patients, and is generally full. The annual number of out-patients is over 13,000. It owes its origin to a gift of £15,000 made by Mr Gokaldas Tejpal, and a similar gift by Mr Rustumjee Jamsetjee Jeejeebhoy.

St Xavier's College, Cruikshank Road, and St Xavier's High School, Carnac Road, founded in 1867, are now separate institutions, both under the Jesuit fathers. The College, with 800 pupils for university studies, includes a highly-equipped science department. The High School (1200 pupils) is a

massive building, with a high octagonal tower.

Opposite the High School is the new Court of Small Causes, just being built. Near by, at the entrance to the native town, was formerly the Robert Money School, founded in 1838, but now removed to Girgaum and under the management of the C.M.S.

The Elphinstone High School is the Government public school of Bombay, and retained possession of the original buildings on this site when the *College Department* was separated to form the Elphinstone College. In front of it is a fine flight of steps.

"The object of this school is to furnish a high-class and liberal education up to the standard of the University entrance examination, at fees within the reach of the middle-class people of Bombay and Mufassal. It has classes for the study of English, Mahratti, Gujarati, Sanskrit, Latin, and Persian, and contains 28 classrooms, a hall on the first floor measuring 62 ft. by 35 ft., and a library. There are 700 scholars in the school under a Principal, and 42 masters; there are also instructors in drill and cricket. The building, which is 452 ft. long, was designed by Mr G. T. Molecey. Sir A. Sassoon contributed 1½ lakhs of rupees towards it.

The Pestonji Kama Hospital, for *Women and Children*, is a Gothic building containing 75 beds. It owes its existence to the gift of Rs.164,000 by Mr Pestonjee Hormusjee Cama, as the Allbless Obstetric Hospital beyond it does to the munificence of Mr Bomanjee Eduljee Allbless. The latter contains 30 beds. Both are under the Dufferin Fund and the sole management of lady doctors, the nursing being done by the Sisters of All Saints, who also nurse in the Jamsetjee Jeejeebhoy and St George's Hospitals. Farther E.,

and adjoining the Municipal Offices, are the lofty buildings of the Esplanade Police Courts, erected in 1884-88.

The Crawford Market was founded by Mr Arthur Crawford, C.S., Municipal Commissioner from 1865 to 1871, and cost over 11 lakhs of Rs. It consists of a Central Hall, in which is a drinking fountain, given by Sir Cowasjee Jehangir Readymoney, surmounted by a Clock Tower, 128 ft. high. To the right is a wing, 150 ft. by 100 ft., in which are fruit and flowers, and on the left is another wing, 350 ft. by 100 ft., for vegetables, etc., etc. The whole is covered with a double iron roof. The ground is paved with flagstones from Caithness. "In that collection of handsome and spacious halls . . . fish, flesh, vegetables, flowers, fruit, and general commodities are vended in separate buildings, all kept in admirable order and cleanliness, and all opening upon green and shady gardens" (Edwin Arnold). There are many kinds of plantains or bananas; the finest are short, thick, and yellow. The best oranges are those from Nagpur, and the best grapes are from Aurangabad. The mangoes come in in May; the best are grown about Mazagon,¹ where, however, few trees now remain. The bulk of the mangoes now come from Bangalore and other places in the south. The Pummelow, the *Citrus decumana*, is particularly fine in Bombay. The *Fish Market* is at the end of the *Mutton Market*. The turtles come from Karachi, in Sind. The oysters are of moderate size and well-flavoured. The *Palla* fish, generally about 2 ft. long, the salmon of India, is excellent, but has many troublesome bones. The best fish of all is the pomfret, or pomfret, a

¹ It was the failure of supplies of Mazagon mangoes which specially annoyed the Wazir Fazl-ud-din in *Lala Rookh*.

flat fish. The *Bombil*, called by the English *Bommelo* and *Bombay Duck*, is a glutinous fish, much used when salted and dried. Near the fountain, with its beautiful shrubs, are seats for loungers. On the S. side is the *Poultry Market*, where fowls, ducks, turkeys, snipe, curlew, teal, and occasionally florican may be purchased when in season. The market well deserves a visit early in the morning, though the visitor must expect to find the crowd dense and the hubbub deafening.

A little N.W. of the market, extending to the Back Bay near the Marine Lines Station, is Princess Street, named after, and on 16th November 1905 declared open by Her Majesty Queen Mary (then Princess of Wales), opening out one of the most congested old quarters of the city. This was the first arterial thoroughfare opened by the City Improvement Trust. Another main one, Sandhurst Road, runs from the head of the Back Bay to Dongri Street, and through Naorji Hill to the Docks. Another Trust road runs from Queen's Road to Jacob's Circle, past the Byculla Club.

N.E. of the market and between the main native city and the sea are the principal commercial docks of Bombay. The Victoria Dock occupies the space formerly taken up by the Masjid and Nicol basins. It covers 25 acres, and has an entrance 80 ft. in width. Prince's Dock, lying N. of this and connected with it, was commenced during the Prince of Wales's visit in 1875-76. In excavating it the remains of a submerged forest were found at a depth of about 10 ft. About 100 trees from 10 ft. to 20 ft. long were exhumed, the wood being red and very hard. The dock is 1460 ft. \times 1600 ft., and extends over 30 acres, and is capable of containing twenty ocean steamers. It is fitted with a tidal observatory. On the N.W. again is the Merewether Dry Dock, and

adjacent to the docks are a whole street of warehouses and offices, the Church of St Nicholas, and the Seamen's Institute, round which the Harbour Mission centres. South of the Victoria Dock has been constructed the Alexandra Dock, of which the foundation-stone was laid by King George V. (then Prince of Wales) on 13th November 1905, and which is the largest in India. It extends S. of the Ballard Pier, and encloses an area of 49.52 acres. The depth of water in it is 47 ft., and the Hughes Dry Dock is 1000 ft. long, and has an entrance 100 ft. wide. The Dock was opened on the 21st of March 1914. The total cost of the works is nearly 600 lakhs. These recent developments have been carried out under the professional charge of the Trust Engineer, Mr P. Glynn Messent, C.I.E. Sir Walter Hughes, C.I.E., was Chairman of the Trust up to 1910. Sir Frederick Sprott has been Chairman since 1910.

All these docks were excavated on the estate known as the Elphinstone and Mody Bay Reclamations, which have taken in from the sea 483 acres, and have raised and improved 157 acres. The Elphinstone and the Mody Bay Reclamations, S. of the Victoria Dock, have transformed the Eastern foreshore of the island from a mud swamp to a busy mercantile quarter worthy of the Capital of Western India. A still greater scheme of reclamation is now approaching completion between Mazagon and Sewri. A grain depot has been established on this reclamation, as well as temporary depots for cotton and coal. The Cotton Green will be moved from Colaba to this reclamation in a few years' time.

The whole of the Trustees' Docks are now connected with the two railways which feed Bombay, namely, the G.I.P. Railway and B.B. and C.I. Railway, and by the Port Trust Railway, the point of junction being at Wadala,

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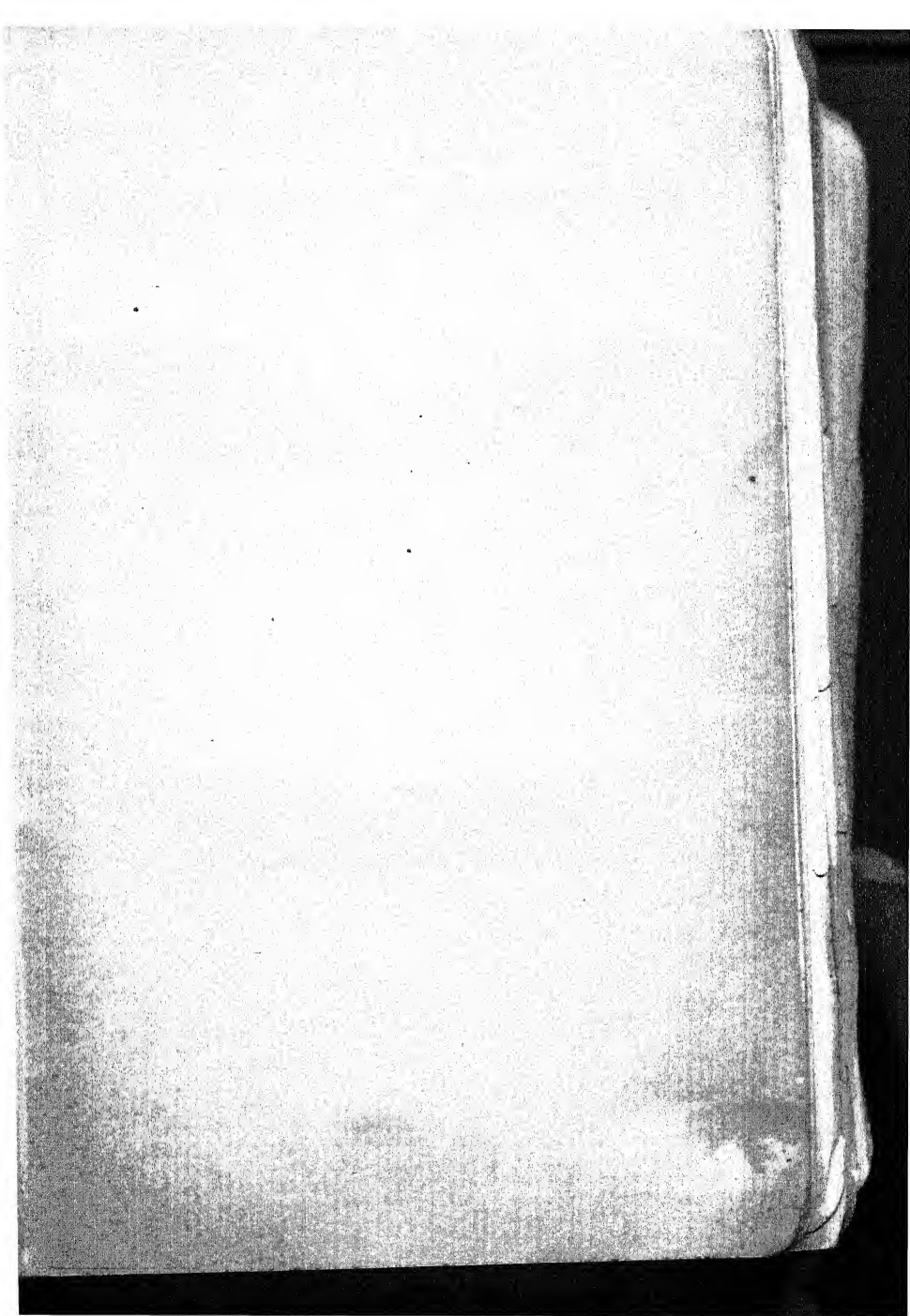
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about 6 m. North of the Alexander Dock.

The Dockyard of the P. & O. Company lies $\frac{1}{2}$ m. N. of Prince's Dock, in the suburb of Mazagon. It covers 12 acres, and there are iron sheds for 18,000 tons of coal. The Ritchie Dock is 495 ft. long, and capable of receiving vessels of deep draught. There is a complete engineering establishment at the dock capable of carrying out work of all descriptions. Close by is the Electrical Power Station which lights the city and runs the tramway service.

In the Native City the streets and bazars are narrow and tortuous, but generally clean and bright. Some of the houses are remarkably fine as works of art, and have been much influenced by the wooden architectural style of Gujarat. Their fronts are covered with carving, and in some cases they have projecting storeys supported upon elaborately sculptured corbels. Here and there are mosques and Hindu temples gaudily painted. The streets teem with life. Sir Edwin Arnold writes of them: "A tide of Asiatic humanity ebbs and flows up and down the Bhendi bazar, and through the chief mercantile thoroughfares. Nowhere could be seen a play of livelier hues, a busier and brighter city life. Besides the endless crowds of Hindu, Gujarati, and Mahratta people coming and going between rows of grotesquely-painted houses and temples, there are to be studied here specimens of every race and nation of the East."

There are nearly 3000 jewellers of the different Indian nationalities in Bombay, who find constant and lucrative employment. One of the most active industries is the manufacture of brass and copper pots and other utensils. "The Copper Bazar, opposite the Mombadevi Tank," is the busiest and

noisiest, and one of the most delightful streets."¹ The black wood-carving is famous, as is the sandal-wood and other carving; the term "Bombay Boxes" includes sandal-wood carving as well as inlay work. Tortoise-shell carving is a *speciality*, also lacquered turnery. Gold and silver thread is manufactured and used for lace, and Bombay embroidery is much prized. The Bombay School of Pottery, under the guidance of Mr George Terry, has developed two original varieties of glazed pottery.

In Bellasis Road, Byculla, also, are the Arab Stables, well worth a visit in the early morning, not only for the sake of viewing some of the finest horses in the East, but to see the Arabs themselves who bring them to Bombay for sale. The stables of the importers of Australian horses are also near here.

The Nal Bazar, in Sandhurst Road, in the N.W. quarter of the city, supplies a large part of Bombay, and is generally immensely crowded.

A little S. of the Bazar is the Pinjrapol, or Native Infirmary for Sick Animals, a curious institution, covering several acres. This place is in the quarter called Bholeswar, "Lord of the Simple"; and the temple of the deity so called, a form of Siva, is within the enclosure. Near it again, to the S.W., is the Roman Catholic Cathedral, N.S., da Esperanca, and, to the S.E., the Mombadevi Tank and Temple, from which the name of Bombay is believed to be derived. S. of the Tank is the Jami Masjid, and E. of this is the main thorough-

¹ Momba (Mumba) itself is a corruption of Maha Amma (Amba), Great Mother. (See p. 2).

² Sir G. Birdwood's *Industrial Arts of India*, which see for further particulars.

fare of the city, Abdur Rahman Street, continued N. by Parel Street. Near the point where the latter crosses Grant Road from the W. is the Jamsetjee Jeejeebhoy Hospital, erected in 1845 at the joint expense of that gentleman and the E.I. Company, and having accommodation for 500 patients. In the hall is a bronze statue of Sir Jamsetjee Jeejeebhoy, a copy of one in the Town Hall. Attached to it are a Hospital for Incurables, the Bai Motlabai Wadia Obstetric Hospital, and the Dinshaw Maneckjee Petit Hospital for women and children, erected in 1889 and 1890.

Adjoining the Hospital is the Grant Medical College, established in 1845 in memory of Sir Robert Grant, Governor of Bombay. Besides the Principal and nine professors, there are twelve demonstrators and tutors in the College. The Museum is full of curious things. The grounds cover 2 acres, and are made instructive by planting in them all kinds of useful trees and shrubs.

A little to the S.E. of the Hospital are the Jail and a European Workhouse. N. from the Hospital Parel Road leads past Christ Church and the Byculla Station to the Victoria Technical Institute and the Victoria and Albert Museum, and finally to the old Government House at Parel. The Institute occupies the old building of the Elphinstone College, opposite the Victoria Gardens, built from a gift by Sir Cowasjee Jehangir Readymoney, and given up in 1890. It is under a Principal assisted by eight professors, and is intended to provide a training in Art and Science in their application to industrial and other purposes.

The Victoria and Albert Museum is a handsome building, standing in the gardens about 100 yds. back from the road. Until 1857 the

collection, which is not an important one, was kept in the Fort Barracks, but, on Sir G. Birdwood being appointed curator by Lord Elphinstone, he raised a subscription of a lakh for building this Museum. Sir B. Frere laid the first stone in 1862, and Government completed the building in 1871. The Clock Tower in front of it was erected by Sir Albert Sassoon, who also presented the fine statue of Prince Albert, by Noble. The Victoria Gardens, in which the Museum stands, have an area of 34 acres, and are prettily laid out. To the right of the S. entrance to them are the remains of the stone elephant which gave the island of Elephanta its name; and on the E. side of them are a Menagerie and Deer Park. The band plays here twice a-week, and over two millions visit the Gardens yearly, one million visiting the Museum.

Parel Road continues from here past the Veterinary College, built on a site given by Sir Dinshaw Maneckjee Petit, to the Old Government House. This was a Portuguese place of worship, confiscated by the English Government on account of the conduct of the Jesuits in 1720. Governor Hornby was the first who took up his residence there, between 1771-80. To supply the required accommodation Mr Elphinstone built the right and left wings. The public rooms are in the centre facing the W. The drawing-room or ballroom, above the dining-room, occupies the place of the old Portuguese chapel. Recent changes have made these objects unrecognisable. The building is used as a laboratory for Bacterial Research and the study of Tropical Medicine. On the staircase there is a bust, and in the ballroom a portrait, of the Duke of Wellington. At the end of the ballroom is what is called the Darbar Room. From the S.

corridor steps descend to a platform in the garden, where the band plays. The garden of Parel is pretty, and has at its W. extremity a tank, and on its margin a terrace, which rises about 10 ft. above the water and the grounds.

The European Cemetery, at Sewri, E. of Parel, formerly a Botanical Garden, is a sheltered spot under Flagstaff Hill. The garden was turned into a cemetery about 1867.

2 m. N. of Parel is the Acworth Leper Asylum, near Matunga Village. The Sassoon Reformatory is situated near the Matunga Road Station of the B.B. and C.I. Railway.

The drive round the Back Bay to Malabar Hill, 180 ft. high, by Queen's Road and Malabar Hill Road, is extremely beautiful and interesting. Beyond the Marine Lines Station are an enclosed burning place of the Hindus and a closed Muhammadan and Christian cemetery, and farther on is the Wilson College (named after Rev. Dr J. Wilson, F.R.S., Oriental scholar and Scottish missionary), for the education of young men—a fine building, which cost a lakh and a half of rupees, and is one of the largest colleges for natives in Western India. The staff consists of a Principal and nine professors.

At about 3 m. from the Fort the road begins to ascend a spur of Malabar Hill. Near the top, on the left, are the entrance gates to the drive through the grounds (private) of Government House at Malabar Point, with a pleasant view across Back Bay to the city of Bombay on the farther side. Below, at the extreme point, there used to be a battery, which could sweep the sea approach. Not far off to the N. a large ship, the *Diamond*, was wrecked, and eighty passengers were drowned. Sir Evan Nepean (1812-19) was the first Governor to reside at

Malabar Point. In 1819-20 Mr Elphinstone added a public breakfast-room and a detached sleeping bungalow on a small scale. In 1828 Sir John Malcolm considerably enlarged the residence at Malabar Point, and constituted it a Government House. Close by is the picturesque temple of Wal-keswar, the "Sand Lord," built c. 1000 A.D. Throngs of Hindus will be met coming from it, their foreheads newly coloured with the sectarian mark. Rama, on his way from Ayodhya (Oudh) to Lanka (p. lxxii) to recover his bride Sita, carried off by Ravana, halted here for the night. Lakshman provided his brother Rama with a Lingam from Benares every night. This night he failed to arrive in time, and Rama made for himself a Lingam of the sand at the spot. On the arrival of the Portuguese in after ages, this sprang into the sea from horror of the barbarians. There is a small but very picturesque tank here, adorned with flights of steps, surrounded by Brahmans' houses and shrines. When Rama thirsted here, he shot an arrow into the earth, and forthwith appeared the *Vanatirtha*, "Arrow-Tank."

The drive from Malabar Point, and thence along the sea by Breach Candy,¹ under the W. side of Cumballa Hill, is one of the most beautiful in the island, especially at evening. On these hills are situated the principal residences of the European community and many wealthy natives, surrounded by small but bright gardens. On Cumballa Hill is the new Bomanji Dinshaw Petit Hospital for Parsis, built at a cost of 15 lakhs, and with a present endowment of 5 lakhs. At the N. end of Breach

¹ Various derivations and meanings of this name have been put forward. Mr Edwardes (*Gazetteer of Bombay*) suggests it means "the beach at the mouth of the hollow or pass—that is to say, the hollow between Cumballa ridge on the north and the Malabar ridge on the south." Candy = khind or pass.

Candy are the Mahalakshmi Temple and Tank on the sea. In the centre of Malabar Hill, about 180 ft. above the sea, are the grounds of the Ladies' Gymkhana, and beyond them the Hanging Gardens, affording lovely views of the Back Bay and of the great line of grand buildings rising on the farther side of it, and of the harbour and islands and mountains beyond them. Between the gardens is All Saints' Church, and beyond them and N. of the head of the curve of the bay are the **Five Parsi Towers of Silence**. In order to see them, permission must be obtained from the secretary to the Parsi Panchayat. Sir Jamsetjee Jeejeebhoy, at his own expense, made the road which leads to the Towers on the N. side, and gave 100,000 sq. yds. of land on the N. and E. sides of the Towers. Within the gateway of an outer enclosure a flight of eighty steps mounts up to a gateway in an inner wall. From this point the visitor is accompanied by an official of the Panchayat, and turning to the right comes to a stone building, where, during funerals, prayer is offered. At a Parsi funeral the bier is carried up the steps by four Nasr Salars, or "Carriers of the Dead," and followed by two bearded men and a large number of Parsi mourners in white robes walking two and two in procession. The bearded men, who come next the bier, are the only persons who enter the tower. On leaving the tower, after depositing the corpse on the grating within, they proceed to the purifying place, where they wash and leave the clothes they have worn in a tower built for that express purpose. The general mourners have their clothes linked, in which there is a mystic meaning. There is a model of one of the Towers which was exhibited to the Prince of Wales (now King George V.) in 1905, and is produced to visitors. The five towers

are cylindrical in shape, and whitewashed. The largest (276 ft. round and 25 ft. high) cost £30,000, while the other four on an average cost £20,000 each. At 8 ft. from the ground is an aperture in the encircling wall about $5\frac{1}{2}$ ft. square, to which the carriers of the dead ascend by a flight of steps. Inside the plan of the building resembles a circular gridiron, gradually depressed towards the centre, in which is a well 5 ft. in diameter. Besides the circular wall which encloses this well there are two other circular walls between it and the outside, with footpaths running upon them; the spaces between them are divided into compartments by radiating walls from an imaginary centre. The bodies of adult males are laid in the outer series of compartments thus formed, the women in the middle series, and the children in that nearest the well. They are placed in these grooves quite naked, and in half an hour the flesh is so completely devoured by the numerous vultures that inhabit the trees around that nothing but the skeleton remains. This is left to bleach in sun and wind till it becomes perfectly dry. Then the carriers of the dead, gloved and with tongs, remove the bones from the grooves and cast them into the well. Here they crumble into dust. The dust in the well accumulates so slowly that in forty years it rose only 5 ft. This method of interment originates from the veneration the Parsis pay to the elements. Fire is too highly regarded by them to allow it to be polluted by burning the dead. Water is almost equally respected, and so is earth; hence this singular mode of interment has been devised. There is, however, another reason. Zartasht said that rich and poor must meet in death; and this saying has been literally interpreted and carried out by the contrivance of the well. The surroundings of the Towers

are arranged to foster calm meditation. The mourner at once arrives at the house of prayer, and around is a beautiful garden full of flowers and flowering shrubs, where, under the shade of fine trees, relatives of the deceased can sit and meditate; and the view to the W. and S. over the waters, and to the E. and N. over the harbour and the distant mountains beyond, is enchanting. Even the cypresses, as the Parsis themselves say, tapering upwards, point the way to heaven. At the S.E. foot of the hill is an Almshouse for decayed Parsis of both sexes, erected by the sons of the late Fardonjee Sorabjee Parak. The drive, if a motor is employed, should be continued along the Hornby Vellard to Warli and through the beautiful Mahim woods of coconut and other palm-trees.

The Parsi Dharmsala, in the Gam Devi Road, intended for poor Persian Parsis, is passed on the approach to the Towers of Silence from the S. A similar dharmsala close by was erected by Sir Cowasjee Jehangir Readymoney, in memory of his grandfather in 1812.

The Tata Hydro Electric Scheme near Bombay, inaugurated by Sir Dorab Tata, may be considered one of the most remarkable in the whole world. It is unique in so far as it has aimed at creating its own head of water by impounding the monsoon rainfall on the Ghats at Lonauli (p. 462), often 500 in., in extensive hydraulic works, comprising the three lakes formed at Shirawta, Walwhan, and Lonauli, with intercommunicating duct lines, forebay, etc. The dams of these three lakes are approximately 90, 70, and 34 ft. in height, with areas of 3000, 1700, and 720 acres respectively, all at 2000 ft. above sea-level. The foundation-stone of the first dam, which impounds the Lonauli Lake, was

laid by Sir George Clarke on the 8th February 1911. The ducts lead the water to a forebay near the Duke's Nose, where it enters the Pipe Line, to take a plunge of 1740 ft. down to the Generating Station at Khopoli, where 40,000 horse-power is being generated by five big turbines. When the scheme is extended to its fullest capacity, with three more turbines, it may be possible to develop 80,000 horse-power. The water which will thus be utilised and released at Khopoli, computed in cubic feet per second, will equal the River Thames in volume. The power generated is conveyed 42 m. to a Receiving Station at Parel, in the Island of Bombay, by aerial transmission cables at a pressure of 100,000 volts, crossing several navigable creeks on lofty steel towers. From the Receiving Station the first instalment of 40,000 horse-power is distributed, among other consumers, to thirty-four mills. The introduction of electric power will, it is hoped, remove the present smoke nuisance in Bombay when it has sufficiently replaced its rival—steam.

MISSIONS.

The S.P.G., with Church in Kamatipura Road, has four missionary clergy in the town, and a branch of the Ladies' Association working in the zenanas.

The C.M.S. (established in Bombay since 1820) has a *Church* in Dhanji Street, and large *Schools* for boys and girls at Girgaon.

The Mission Priests of St John the Evangelist (Cowley Fathers) serve the Church of St Peter's, Mazagon, and have a Mission House and Schools for boys and girls near it; also a native Mission and Orphanage in Babula Tank Road.

The "All Saints" Sisters (from Margaret Street) have been working in Bombay since 1878, and

nurse in the following Hospitals : European General, Jamsetjee Jeejeebhoy, and Pestonji Kama. They have two High Schools for girls, in Elphinstone Circle and near St Peter's, Mazagon.

The *American Presbyterian Board of Foreign Missions* or *Mahratta Mission, Byculla*, has a considerable staff. The *United Free Church of Scotland* has a strong body of missionaries connected with the Wilson Mission College (p. 19), affiliated to the University.

The Roman Catholic Church is represented by the Jesuit Fathers as well as secular clergy, under an archbishop, who have eleven churches and eleven chapels in the island, large schools and a college for boys, and several convent schools and charitable institution for girls. The old Portuguese Padroado jurisdiction is also represented by a large number of churches, chapels and secular clergy, under the Bishop of Damaun, who have care of the vast number of immigrants from Goa.

OTHER SIGHTS IN BOMBAY.

The Natural History Society's Museum in Apollo Street.

The Bombay Branch, Royal Asiatic Society's Library and Museum.

The Spinning Mills at Tardeo, Parel, and Warli.

The Malabar Hill Reservoir and Hanging Gardens.

The Locomotive Workshops at Parel.

SIGHTS IN THE VICINITY OF BOMBAY: SHORT TRIPS.

I. IN THE HARBOUR AND BY SEA.

1. Elephanta.
2. Chaul.

3. Down the Coast to Goa and Mangalore.

II. BY THE B.E. AND C.I. RAILWAY.

- | | |
|---|---------------------|
| 1. Bandra. | 3. Kanheri Caves. |
| 2. Jogeswar Caves, Vesava and Aldeamar. | 4. Montpezir Caves. |
| | 5. Bassein. |

III. BY THE G.I.P. RAILWAY.

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|---|--|
| 1. The Vihar Lake. | 5. The Bhor Ghats, Khandala, Lonauli, and Karli Caves. |
| 2. Tansa Lake. | |
| 3. ¹ The Thal Ghats, Igatpuri, and Nasick. | 6. Poona. |
| 4. Matheran. | 7. Mahabaleshwar and Panchgiri. |

I. IN THE HARBOUR AND BY SEA.

(1) *Elephanta* is a small island about 6 m. from the Fort of Bombay. For visiting this remarkable place Cook's launches² run several times weekly, and a coasting launch runs daily from Carnac Bandar. They make the passage in about 1 or 1½ hrs. A bandar-boat may be hired at from Rs. 3 to Rs. 5, in which case the length of the passage will depend on wind and tide. A cheap and convenient way of making the trip is to go by the Harbour Ferry from Carnac Bandar. It starts at 7.30 and is back by 12.15 the same morning, giving ample time to see the caves, which are reached by a walk of 1 m. from the old landing-place in the S.W. of the island. The boat will pass close to Butcher's Island, which is 3 m. nearly due E. from Mazagon Dock. The island is entirely occupied by the Royal Engineering Staff, and the principal wireless installation is placed upon it. The view in this part of the harbour is fine. To the N. is the hill known as the Neat's Tongue, on Trombay Island, which is 1000 ft. above sea-level. The highest point of Elephanta is 568 ft. To the S. is the hill above Karanja, called Dronagiri—a mass of rock thrown down by Hanuman on his flight to Ceylon.

¹ For 3 to 7, see separate entries.

² Messrs T. Cook & Son (office in Esplanade Road).

Elephanta is called by the natives *Gharapuri* ("the town of the rock," or "of purification," according to Dr Wilson), or *Garapuri* ("the town of excavations," according to Dr J. Stevenson). The caves are called *Lenen* (Lena) by the natives, a word used throughout India and Ceylon for these excavations. Probably they were originally hermitages of Buddhist ascetics. The island is covered with low corinda bushes and Tal palms. It consists of two long hills, with a narrow valley between them. About 250 yards to the right of the old landing-place, at the S. end of the island on the rise of one of the hills, and not far from the ruins of an ancient city, was a mass of rock, cut into the shape of an elephant, from which the place derives its European name. In September 1814 its head and neck dropped off, and in 1864 the half shapeless mass was removed to the Victoria Gardens.

The modern landing-place, N.W. of the island, is not a very convenient one, as it consists of a rather slippery pier of separated concrete blocks. The caves are distant about $\frac{1}{4}$ m., and about 250 ft. above the sea, and are approached by easy steps, constructed in 1853 by a native merchant at a cost of Rs.12,000. There is a caretaker's bungalow at the entrance, where a fee of 4 annas is paid, and tea can be obtained; and visitors can sit and rest. The date of the excavation of these caves¹ is now placed about the middle of the 8th century, slightly subsequent to the corresponding cave at Ellora (p. 104). The caves face the N., and are open also to the E. and W. The main hall was enclosed by two wide colonnades of six columns and two centre colonnades of four columns, the recesses on the N. and S. sides consisting of two aisles

separated by two columns, the outer aisle being much shorter than the inner; the length of the central hall from the pillars at each end is 130 ft., and the breadth from the wall of the south recess to the pillars on the outer side of the north recess is just the same. Of the twenty-six columns, including the sets of two at each entrance to the cave, eight have fallen. The columns present some variety of shape and ornament: they have a square shaft rising about half the way up a fluted neck, and a capital of the shape of a squeezed cushion, bound in the middle; the height of the columns varies from 15 ft. to 17 ft.

The *Lingam Shrine*, at the W. end of the hall, stands 4 ft. above the floor of the cave. It is 19 $\frac{1}{2}$ ft. square, with four doors facing different ways. At the outside of each entrance are two large figures representing *dwarpals* or door-keepers, who lean on dwarfs. The *Lingam*, a cylindrical stone 3 ft. high, the emblem of Siva, is worshipped on great occasions by crowds of devotees.

On entering the caves the most striking feature is the Colossal *Three-headed Bust, or Trimurti*, in the S. wall, facing the N. entrance. It is 19 ft. in height, and the faces are between 4 and 5 ft. long. It is the representation of Siva, who is the leading character in all the groups of the cave. The front face is Siva in the character of Brahma, the creator; the E. face (spectator's left) is Siva in the character of Rudra, the destroyer; and the W. face (spectator's right) is considered to be Siva in the character of Vishnu, the preserver, holding a lotus flower in his hand. On either side of the recess is a pilaster with a gigantic *dwarpal* in front of it.

The *Arddhanariswar, or half-male half-female Divinity*, in the first compartment to the E. of the central figure (spectator's left),

¹ See *Cave Temples of India*, by Fergusson and Burgess.

represents Siva, 16 ft. 9 in. high, in the above character. The right half of the figure is intended to be that of a male, and the left that of a female, and thus to represent Siva as uniting the two sexes in his one person. The bull on which two of the hands of the figure lean, known as his *vahana*, or vehicle, is called Nandi, a constant attendant on Siva. Brahma, on his lotus throne, supported by five swans, and with his four faces, is exhibited on the right of the figure. On the left, Vishnu is seen riding on what is now a headless Garuda, a fabulous creature, half man, half eagle. Above and in the background are found a number of inferior gods and sages of the Hindus, among them Indra, the Rain-god, mounted on an elephant.

In the compartment to the W. of the *Trimurti* are two gigantic figures of *Siva* and *Parvati*, the former 16 ft. high, the latter 12 ft. 4 in. Siva has a high cap, on which is a crescent over each temple. From the top of it rises a cup or shell, on which is a three-headed female figure, with broken arms, representing the Ganga proper, the Jumna, and Saraswati, which three streams unite at Prayag, or Allahabad, the sacred meeting-place of the three plaited locks, and form the Ganges. According to a well-known Hindu legend, the Ganges flowed from the hair of Siva. The god is standing, and has four arms, of which the outer left rests on the head of a dwarf, with curly or matted hair. In the dwarf's right hand is a cobra, in his left a *chauri* (fly-whisk); from his neck hangs a necklace, with a tortoise ornament. On Siva's right are Brahma, on his lotus seat, borne by five swans, with four hands, bearing the lotus, roll of the Vedas, and butter-dish, and Indra on his elephant.

The *Marriage of Siva and Parvati* is a sculptured group (greatly

damaged) in the S. wall of the W. aisle. The position of Parvati on the right of Siva shows that she is his bride; for to stand on the right of her husband, and to eat with him, are privileges rarely vouchsafed to a Hindu wife, save on her wedding-day. In the corner, at the right of Parvati, is Brahma, known by his three visible faces, sitting and reading, as the priest of the gods, the sacred texts suited to the marriage ceremony. Above, on Siva's left, is Vishnu. Among the attendants on the right of Parvati is one bearing a water-pot for the ceremony. This is probably Chandra, the moon-god. Behind the bashful goddess is a male figure, probably her father, Himalaya, who is pushing her forward.

Opposite this, in the N.W. corner of the hall, is a relief of *Kapalabhrīt* or *Bhairava*, with skull and cobra on head and rosary of skulls round neck; two of his eight hands are devoted to the slaughter of a human being, and a third holds up a body for slaughter. At the W. end of the North aisle, by which the cave is entered, is a relief of *Siva performing the Tandava dance*; on his left is Parvati, and above is a very perfect Ganesh. Opposite this, at the E. end of the aisle, is a representation of *Siva as Lakulisa*. The figure so much resembles Buddha that the early describers of the cave before Erskine thought it to be that personage. The figure has the remains of two arms, which appear to have rested in his lap. It is seated on a lotus, the stalk of which is supported by two figures below. In the aisle behind the East entrance again are two reliefs on the N. and S. ends. The first of these represents *Ravana, the demon king of Lanka*, or Ceylon, attempting to remove Kailas, the heavenly hill of Siva, to his own kingdom, in order that he may have his tutelary deity always with him, for Ravana was ever a

worshipper of Siva. Ravana has ten heads and twenty arms, and is with his back to the spectator. Siva is seen in Kailas, with Parvati on his right, and votaries and Rishis in the background. The legend runs that Ravana shook Kailas so much that Parvati was alarmed, whereupon Siva pressed down the hill with one of his toes on the head of Ravana, who remained immovable for 10,000 years.

The last relief opposite, this shows *Siva and Parvati* seated together, with groups of male and female inferior divinities showering down flowers from above. The rock is cut into various shapes to represent the peaks of Kailas, Siva's heaven. Behind Siva and Parvati is a female figure carrying a child on her hip, from which it was supposed that the sculpture represents the birth of Skanda, the war-god; the later view is that the scene represents Parvati in a temper.

Beyond the main hall on the E. side is the *East Wing*, consisting of an open court 55 ft. wide, in the centre of which was a circular platform, probably for a Nandi. On the S. side of the court is a temple on a high terrace, reached by steps with lions at the top of them. The portico of the temple has a chamber at each end, that on the E. end with figures of Siva, Vishnu and Brahma, and of the seven great goddesses or divine mothers (p. 107). The shrine of the temple measures 14 by 16 ft., and has an altar and lingam inside it. The *West Wing* of the cave has also an open court with a large cistern on the S. side, and on the W. side a small open chapel with a lingam in it.

Round the hill, a little to the S., are two other excavations fronting the E. These are also Lingam shrines, with *dwarapals* sculptured outside.

(2) Chaul.—This is a group of

ancient Portuguese and Moorish forts at the mouth of a creek just outside the harbour. The steamer sails every day and the stopping place is called Revdanda. One night out is sufficient, but better two. There is a Janjira State bungalow, for which leave has to be asked from the Political Agent, but it is scantily furnished, and food, servants and bedding must be taken. It is possible to camp out in a tent, if preferred, on the summit of Korlai hill; a lovely fort, with panoramic view. On the N. side of the creek is the old Portuguese city-fort of Chaul, similar but second to Bassein, with its walls and groups of churches in ruins overgrown by a dense grove of palms. Chaul was taken by the Portuguese in 1522 and made subordinate to Bassein, and was lost to the Mahrattas in 1739. Close by was the once famous emporium and city of Chaul, of which not a trace remains. The village of Korlai contains an old Portuguese church and a Christian population of fishermen, who retain the old Portuguese customs.

(3) Down the Coast to Goa and Mangalore. There is a daily service of steamers running Southwards to most of the minor ports along the Bombay coast. One service reaches Goa in twenty-four hours; while a larger set of boats pass further to Carwar, Honowar and Mangalore twice a week—a pleasant alternative way of reaching these places instead of taking train.

II. BY THE B.B. AND C.I. RAILWAY.

(1) 10 m. Bandra station, left, on sea-shore, a favourite residence for persons who have daily business in Bombay. Several *chapels* built by the Portuguese still exist

here, notably that of *Mount Mary*, held in respect for miles around.

(2) The *Jogeswar Cave* lies 2 m. N.E. of Andheri Station and can be reached by tonga. Dr Burgess attributed this Brahman cave to the latter half of the 8th century, perhaps a quarter of a century after the Elephanta Cave, and half a century after the Sitaki Nāhani at Ellora (p. 108). Like the former, it has extensive wings to the central hall, which has a shrine 24 ft. square in the middle, with four doors and a large lingam. The veranda on the S. side is 120 ft. long, and has ten columns of the Elephanta pattern, while twenty more such pillars are arranged in a square in the hall. Measured all over, the cave is the largest Brahmanical excavation known after Kailāsa (p. 107).

From Andheri Station, 2 m. W., is the seaside village of Vesava, used as a holiday resort for Bombay. There are many private bungalows, but no other accommodation. A day's trip should include a sea bathe and a visit across the creek to Aldeamar Fort, first a Portuguese then a Mahratta stronghold.

(3) *Cave Temples of Kanheri*¹ (*Kennery*).—These caves are all excavated in the face of a single hill in the centre of the island of Salsette. The D.B. is at Thana (see Route 2). There are one hundred and nine Buddhist caves on the spot; but, though so numerous, few of them only are interesting as compared with those at Ajanta, Ellora, or Karli. It seems probable that the greater part of them

¹ Travellers who are able to visit the Caves of Karli and Bhaja, or of Nasik, or Ajanta, or Ellora, need not devote time to any of the Excursions to the Jogeswar, Kanheri and Montpezir Caves.

were executed by a colony of Buddhists, "who may have taken refuge here after being expelled from the continent, and who tried to reproduce the lost Karli in their insular retreat." They date from the end of the 2nd century A.D. to about the middle of the 9th, or possibly a little later. The great *Chaitya* is one of the earliest here; those on each side may be two centuries later: the latest is probably the unfinished one, which is the first the traveller approaches by the usual route, and which dates about the 9th or 10th century A.D., or is even still more recent. However this may be, it is at least certain that, to use Heber's words, "the beautiful situation of these caves, their elaborate carving, and their marked connection with Buddha and his religion, render them every way remarkable."

From Thana a cart or light vehicle can proceed 4 m. towards the Tulsi lake. From here the path is narrow, and winds along the sides of rocks, but it is quite possible to proceed along it on horseback. This route is, however, arduous, and not to be recommended to tourists. The caves are easily visited from the Borivli Station of the B.B. and C.I. Railway, from which they are about 5 m. distant. A rough country road, along which carts ply, runs to within a mile of them. Most of the surrounding hills are covered with jungle, but the one in which the caves are is nearly bare, its summit being formed by one large rounded mass of compact rock, under which a softer stratum has been denuded by the rains, forming natural caves, which, slightly improved by art, were appropriated as cells. The path runs in a N. direction up to the ravine, lying E. and W., round which the caves are excavated on six ledges in the mountain side connected by flights of steps. Shortly before the end of

the ravine is reached, a steep ascent leads up to a platform facing W., where the Great Chaitya Cave (No. 3) and two other caves are situated, and whence steps in the rock lead down to the ravine.

Cave No. 3, entered through a forecourt and a veranda, is a copy of that at Karli (p. 462), though much inferior, and probably dates from the 6th century. It is 86 ft. long and 40 ft. wide, and has a colonnade of thirty-four pillars, which encircles the dagoba, standing 16 ft. high, at the back. A number of the pillars have bases and capitals carved with elephants, dagobas, trees, worship of sacred feet, etc. At the ends of the great veranda are two later figures of Buddha, 21 ft. high, and over the door is the great arched window, which forms one of the principal characteristics of these structures. In front of the veranda are two pillars, and on the screen of the back wall are Buddhist carvings. In the forecourt are two attached pillars, on which are four lions and three squat figures. On the left of the court is a round cell with a dagoba, and on the right, at the end of a long excavation (No. 2), are three ruined dagobas, with a Buddhist litany (p. 58) on the rock round them.

At a distance of 150 yds. up the ravine, N.W. of the Chaitya Cave, is the Darbar of the Maharaja Cave (No. 10), which was a dharmasala, or hall of assembly, and not an ordinary vihara. It is 73 ft. \times 32 ft. in size, and has two stone benches running down its longer axis and some cells on the left and back walls. The veranda, which is approached by three flights of steps, has eight columns along the front of it. Nos. 11, 14, and 21, farther up the same (left) side of the ravine, may also be visited. The first has a small court in front of it, the second has some traces of painting, and the third has

columns of the Elephanta type, a Buddhist litany (p. 58), and a figure of Padmapani, crowned by ten adder-heads, in a recess on the right of the porch. Above No. 10 on the hill-side is No. 35, a vihara 40 ft. \times 45 ft., with benches round it, and four octagonal columns in the veranda; on the walls are reliefs of Buddha seated upon a lotus, of a disciple spreading his cloak for him to walk upon, and of another litany. N.W. from these are caves 56 and 66. From the front of the former is a fine view of the sea; in the latter are some fine sculptures and another litany. Some 400 yards to the south, and beyond the Chaitya Cave, is a terrace with monuments over the ashes of Buddhist monks. The number of cisterns and small tanks round the caves and the flights of steps connecting them are remarkable.

22 m. Borivli station is near the Caves of Montpezir (below) and the ruins of a Jesuit monastery of the 16th century. To the Caves of Kanheri (see p. 26), 5 m. distant, there are two routes—both bad—from Thana and Borivli; the latter is the one most used.

(4) *Montpezir Caves (Mandapeswar).*—B.B. and C.I. Railway to Borivli Station, 22½ m. (good clean waiting-room), thence 1 m. by tonga. At the caves are a ruined Portuguese church and Franciscan monastery with a cross close by. Round the N.E. corner of the church are three Brahman caves hewn out of the rock, dating from the 8th century. The cave on the E. is 5 ft. 8 in. \times 21 ft. Adjoining this cave to the W. is a stone basin for water, of which there is a good supply, said never to fail, and this may be one reason why the Portuguese built here. The next cave is 27 ft. 3 in. \times 14 ft. 9 in. In the W. wall is a group of 25 Gana (celestial dwarfs) figures very much mutilated, and

a four-armed Siva. In the corner of the outside wall is half a teak door of the church, with two saints carved on it. The third or W. cave was a vihara (monastery hall) cave in which ten or twelve hermits lived, but was converted into a chapel in 1555 A.D. In the N. part of the E. wall, upside down, is the stone originally over the entrance door, inscribed with the date 1555. At the N.W. are pillared partitions leading to cells, and on the W. side are two pilasters and four pillars about 12 ft. high, with tapering shafts and angular capitals. To the S., on an eminence, is a round tower (40 ft. high), which the priest calls a Calvarium, now surmounted by a statue of Jesus Christ. An Orphanage has been built close by, and the old church has recently been restored. There is a good view from the top over the plain.

22 m. Bhayandar station, on the S. edge of the Bassein creek, which divides Salsette from the mainland. The railway here crosses the river by a very long bridge. On the right, and for some miles up the stream, the scenery is most beautiful—the Kamandrug Hills and Ghorbandar, with the quiet water between them, forming a tropical landscape as charming as can be seen anywhere in India.

33 m. Bassein Road station (D.B.). The ruins are distant about 5 m.

(5) Bassein.—The chief stronghold of the Portuguese from 1534 to 1739. It is a fort-city, with walls intact, containing many ruined churches and palaces. It is reached from Bassein Road station, from which a tonga takes the visitor along a road 7 m. long. By starting early in the morning (say 6 o'clock) and returning by a train at about 4.30 P.M., a pleasant visit can be made in one day.

Food must be taken. Soda-water can be got in the village. Shelter and rest can be got under cover of one of the churches. The tonga should not be paid on arrival, but ordered to return at 2 o'clock for the homeward journey. The principal churches are those of the Franciscans, Dominicans, Jesuits and Augustinians, besides the *Matriz*, or mother church of St Joseph, popularly called the Cathedral. The survey should be completed by a walk round the seaward side of the walls.

The first notice of Bassein is in 1532, when the Portuguese ravaged the neighbourhood. In 1534 they took Daman,¹ which they still hold, and obliged Sultan Bahadur, of Gujarat, then hard pressed by the Emperor Humayun, to cede Bassein in perpetuity. "For more than 200 years Bassein remained in the hands of the Portuguese, and during this time it rose to such prosperity that the city came to be called the Court of the North, and its nobles were proverbial for their wealth and magnificence. With plentiful supplies of both timber and stone, Bassein was adorned by many noble buildings, including a cathedral, five convents, thirteen churches, and an asylum for orphans. The dwellings of the *Hidalgos*, or aristocracy, who alone were allowed to live within the city walls, are described (1675) as stately buildings" (Hunter). Fryer, describing the town in 1675, said: "Here were stately dwellings graced with covered balconies and large windows, two storeys high, with panes of oyster-shell, which is the usual glazing amongst them (the Portuguese) in India, or else latticed." On the 17th February 1739 the Mah rattas invested Bassein, and the town surrendered on the 16th of May

¹ The poet Camoens distinguished himself on this occasion.

after a most desperate resistance, in which the commandant, Silveira de Mineyes, was killed, and 800 of the garrison were killed and wounded, the Mahrattas' loss being upwards of 5000. On the 13th of November 1780 General Goddard arrived before Bassein, and on the 28th his first battery opened against it. He had very powerful artillery, and one battery of twenty mortars, which shortly after opened at the distance of 500 yds., and did great execution. The place surrendered on the 11th December, on which day Colonel Hartley, with a covering army of 2000 men, defeated the Mahrattas' relieving army of upwards of 24,000 men, and killed its distinguished General, Ramchandra Ganesh.

The *Fort*, with the ruins, stands on the Bassein creek, a little away from the sea; it is now entered from the N.

The Old Town, surrounded by walls and ramparts, contains the ruins of the Cathedral of St Joseph and other churches built by Roman Catholic missionaries in the 14th and 15th centuries. Several inscriptions remain, the earliest dated 1536. A guide (if procurable) would be useful to point out the various ruins. Among them are the Church of St Anthony, the Jesuits' church, and the churches and convents of the Augustinians and Franciscans.

III. BY THE G.I.P. RAILWAY.

(1) The Vihar Lake, near the G.I.P. Railway, can best be visited by motor from Bombay, either by Sion Causeway and Kurla, or by Mahim Causeway and Andheri. The road from Bombay to Thana (if the route *via* Kurla is chosen) is left soon after Kurla. If the visitor travels *via* Mahim and Bandra, he takes a cross road at Andheri. The lake covers 1400 acres, and measures $2 \times 1\frac{1}{2}$ m.; it was made by Mr Conybeare, C.E.,

by damming up the Garpur river. It cost £373,650 with the connecting pipes, and can supply 8,000,000 gallons of water a-day. The embankment is 30 ft. broad and 30 ft. above the water. The water is 75 ft. deep, of which 50 ft. are available for the supply of Bombay and 25 ft. are kept for settling. There are many crocodiles in the lake: fish life is not very numerous. Tigers are now unknown, but many have been killed here. One, shot by Mr Robertson, C.S., had killed sixteen persons. *Pawai Lake*, lying below Vihar, was formed by the Municipality in 1890, but its waters are not considered to be sufficiently pure for use in Bombay.

The *Tulsi Lake*, which lies 2 m. to the N., was formed in 1872, at a cost of £40,000, and water is carried thence to the top of Malabar Hill; 2 m. N. again are the Kanheri Caves.

(2) The Tansa Water Supply (G.I.P. Railway to Atgaon Station, 59 m., D.B.).—The increase in the population of Bombay led the Corporation to construct a still larger reservoir on the Tansa River, about 60 m. N.E. of Bombay, which was formally opened by H.E. the Viceroy, Lord Lansdowne, in March 1892. The Dam, which encloses the valley of the Tansa River, completed 1891, is one of the largest pieces of masonry of modern times. It is of a uniform height of 118 ft., and is 2 m. long, 103 ft. thick at the base, and 24 ft. at the top, where a flagged road runs along it. It encloses a lake 8 sq. m. in area, and is capable of supplying 33,000,000 gallons daily. The Corporation decided to duplicate the supply from Tansa—the dam to be raised by 18 ft., and a second pipe laid to Bombay—the total expenditure to be about £500,000 (Engineer, Mr W. Clerke; Contractors, Mr T. C. Glover and Messrs Walsh, Lovatt & Co.).

(3) and (3) The Thal and Bhor Ghats.—The ascent or descent of these Ghats passes through some of the prettiest scenery in all India (see pp. 32 and 461); and those who do not intend to leave or reach Bombay by railway trains which pass them by day, should make a point of visiting them separately. The Thal Ghats can be seen by a railway trip as far as Igatpuri; the traveller can return the same day after taking refreshment at Igatpuri Station.

The Bhor Ghats are even finer than the Thal Ghats, and should not be missed. A visit should be paid to Khandala (p. 462) for the sake of the scenery, which is some of the finest in India. A visit to the Karli Cave can be combined with a trip to Khandala. It should be ascertained whether the Calcutta, Madras and Panjab mail trains run according to the timing in force, passing up or down the Ghats in the daytime.

Malavli.—85 m. from Bombay;
Karli caves 4 m. from railway station (see Route 26).

the journey from Bombay to Calcutta with one through ticket. Cost—1st class, Rs.99, as.1; 2nd class, Rs.49, as.9; and servants, Rs.13 as.7. The 3rd class fare is Rs.16, as.6, p.6 by the mail trains. Luggage—free, 120 lb., 60 lb., and 30 lb.; half those figures in seers, the Indian standard of weight. The 85 m. between Bombay and Igatpuri are by far the most picturesque on the whole line between the Western and Eastern capitals. By the Nagpur and Panjab mails passengers now pass over this portion of the line in daylight; but the Calcutta mail by the E. Indian Railway route traverses it at night.

On leaving Bombay, between Sion and Kurla, the railway passes on a causeway from the island of Bombay to the larger island of Salsette.

9 m. Kurla station. Close by (right) are the once famous cotton-mills, the first started. The Vehar Lake can best be visited by tonga from here.

17 m. Bhandup station for the N. shore of the Vehar Lake (p. 29).

ROUTE 2.

BOMBAY TO CALCUTTA by Kalyan, Nasik, Manmar, Jalgaon, (Caves of Ajanta), Bhusawal, Khandwa, Itarsi, Jubbulpore, Katni, Manikpur, Allahabad, Mughal-sarai (Benares), Patna, Mokameh, Lakhisarai, and Asansol, with journeys to Pachmarhi, the Marble Rocks, Buddh Gaya, and Parasnath.

Rail 1349 m. (G.I.P.R. and E.I.R.); mail train 43 hours to Calcutta.

For service to N. India by this route, see p. 135.

The rule for breaking journeys on Indian railways allows the traveller to spend sixteen days on

21 m. Thana station, D.B., and a *dharmsala* for Indians. An early Portuguese settlement, commanding the most frequented passage from the mainland to the island of Salsette. Marco Polo (1298 A.D.) says: "Tana is a great kingdom, lying towards the West. . . . There is much traffic here, and many ships and merchants frequent the place." In 1320 four Christian companions of Friar Odoricus here suffered martyrdom. Friar Jordanus narrates that he baptized about ninety persons ten days' journey from Thana, besides thirty-five who were baptized between Thana and Supara.

The country round Thana was highly cultivated, and was studded

with mansions of the Portuguese, when, in 1737, it was wrested from them by the Mahrattas. In 1774 the Portuguese sent a formidable armament from Europe for the avowed object of recovering their lost possessions. The Government of Bombay determined to anticipate their enterprise, and to seize upon the island for the English. A force was prepared under General Robert Gordon, and Thana was taken after a siege of three days. On 6th March 1775 the Peshwa Raghoba, by the Treaty of Surat, ceded the island of Salsette in perpetuity. In 1816 Trimbakji Dangle, the celebrated Minister of Baji Rao II., the last Peshwa, effected his escape from the fort of Thana, though guarded by a strong body of European soldiers. The difficulties of this escape were greatly exaggerated all over the Mahratta country, and it was compared to that of Sivaji from the power of Aurangzeb. The principal agent in this exploit was a Mahratta horse-keeper in the service of one of the British officers of the garrison, who, passing and repassing Trimbakji's cell, as if to exercise his master's horse, sang the information he wished to convey in a careless manner, which disarmed suspicion. Bishop Heber, who had seen Trimbakji imprisoned in the fort of Chunar, was much interested in this escape, and writes:—

"The groom's singing was made up of verses like the following—

"Behind the bush the bowmen hide,
The horse beneath the tree;
Where shall I find a knight will ride
The jungle paths with me?"

"There are five-and-fifty coursers there,
And four-and-fifty men;
When the fifty-fifth shall mount his steed,
The Deccan thrives again."

The English Church was being built when Bishop Heber arrived, and on 10th July 1825 was consecrated by him. In the 16th century the *Silk Industry* here employed about six thousand

persons. It is now believed to be confined to one family.

33 m. Kalyan junction station (R.). Here the Madras line through Poona and Raichur branches off S.E. (Route 26). This is a very ancient town, and was once the capital of the Chalukyas. In 1780, the Mahrattas having cut off the supplies from Bombay and Salsette, the British Government determined to occupy the Konkan opposite Thana as far as the Ghats. Accordingly several posts were seized, and Kalyan amongst them; and here Captain Richard Campbell was placed with a garrison. Nana Farnavis forthwith assembled a large force to recover Kalyan, on which he set a high value, and attacked the English advanced post at the Ghats, and killed or made prisoners the whole detachment. He then compelled Ensign Fyfe, the only surviving officer, to write to Captain Campbell that, unless he surrendered, he would put all his prisoners, twenty-six in number, to death, storm Kalyan, and put all the garrison to the sword. To this Campbell replied that "the Nana was welcome to the town if he could take it." After a spirited defence he was relieved by Colonel Hartley, on the 24th May, just as the Mahrattas were about to storm. The remains of buildings round Kalyan are very extensive; and Fryer, who visited the place in 1673, "gazed with astonishment on ruins of stately fabrics, and many traces of departed magnificence."

Between Kalyan and Igatpuri the railway ascends from the Konkan to the Deccan plateau by the mountain pass known as the Thal Ghat.

59 m. Atgaon station, for Tansa (p. 29).

75 m. Kasara station (R.), 930 ft. above the sea. Here a special engine is attached, and the

steeper ascent of the Ghat begins. In $9\frac{1}{2}$ m. the line ascends 1050 ft. higher from Kasara to Igatpuri.

At $79\frac{1}{2}$ m. was the Reversing Station (the Ehegdon Viaduct, said to be the highest in India, 190 ft. above the valley), and the ascent terminated at 85 m., Igatpuri D.B. (R.), where the special engine and brakes were removed, but the Reversing Station has not been in use since early in 1917, a new double track, which avoids the necessity of reversing, having come into use then.

The ascent of the Thal Ghat is at all seasons interesting; but it is most beautiful in September owing to the wild flowers. The leaves are then bright green, and the country below the Ghats is all streams, pools, and inundations, and the Ghats themselves all cascades and torrents. Igatpuri, properly Wigatpura, "the town of difficulties," so called on account of the precipitous road that preceded the railway, is a pleasant sanatorium, 2000 ft. above the sea, and summer resort of Europeans from Bombay. There are several European bungalows belonging to railway officials. Half a mile from the station a picturesque lake supplies Igatpuri and Kasara with excellent water. The line passes through a comparatively level country, with low mountains on either side, but to the south can be seen the peak of Kalsubai (5427 ft.), the highest mountain in the Presidency, and Sivaji's hill forts of Alang, Kurlang, Aundha, and Patta.

To the S. of the line is the lake formed by the dam on the Darna river, an important irrigation work finished in 1912. The dam itself is 2 m. from Aswali station (101 m.).

113 m. Deolali station. A halting-place for troops arriving from or proceeding to Europe. There are barracks for 1000 men. It is also a hill-resort much patronised by Parsis.

117 m. Nasik Road station & D.B. The town, the *Nasika* of Ptolemy, 2000 ft. above sea-level (population 33,463), lies $4\frac{1}{2}$ m. N.W. of the station.

A tramway conveys passengers from the station to the town. It is one of the most holy places of the Hindus, owing to its position on the banks of the sacred river Godavari, about 19 m. from its source at Trimbak, and may be called the Western Benares, as the Godavari is termed the Ganga—"Ganges." The sacredness of the river is said to have been revealed by Rama to the Rishi Gautama. The Godavari and Ganges are said to issue from the same source by an underground passage. Thirteen hundred families of Brahman priests are settled here, and all Hindus of rank on visiting it leave a record of their visit with their Upadhyas, or "family priest," for each noble family has such a priest at each celebrated place of pilgrimage. In this record are entered the names of the visitor's ancestors, and thus the pedigree of every Hindu chief is to be found in the keeping of these Upadhyas. Even Sir Jang Bahadur, (1816-1877), formerly *de facto* ruler of Nepal, had his Upadhyas at Nasik. The present Gaekwar owes his seat on the throne to this, for when, in 1874, the Gaekwar, Malhar Rao, was deposed, and an heir sought for, the family Upadhyas at Nasik supplied proofs of the young prince's legitimate descent from Pratap Rao, brother of Damaji, the third Gaekwar.

At Nasik the river, here 80 yds. broad, is lined on either side for a distance of 400 yds. with flights of steps, and dotted with temples and shrines, and, as in most Indian cities situated near flowing rivers, the view along the banks when hundreds of men and women are bathing is extremely picturesque. The part of the town which stands on the right bank of the river is built upon three hills, and is

divided into the New Town N. and the Old Town S. The quarter on the left bank, where are the chief objects of interest, is called *Panchavati*. The manufacture of brass and copper ware, especially of idols, caskets, boxes, chains, lamps, etc., flourishes here. Specimens of the beautiful old work, though rare, are still occasionally to be found in the "old" copper bazar.

The temples at Nasik, though picturesque, have no striking architectural features. The *Sundar Narayan Temple*, built by one of Holkar's Sardars in 1725, stands at the head of the Ghats on the W. side of the city, close to the Sati gate and ground, and is a miracle of art. Below it may be seen the temples of *Balaji* and of the *White Rama*, and the *Memorial*, erected to the Raja of Kapurthala, who died in 1870, near Aden, on his way to Europe. From it the river is crossed by a bridge, completed in 1897, which cost Rs.181,000.

Half a mile to the E., on the *Panchavati* side, is a fine house of the Rastia family. From here a walk a few hundred yards up a lane leads to five very old and large trees of the *Ficus indica*. Under the largest is a small building. (None but Hindus may pass the vestibule.) It consists of a low front room, from which steps descend to two apartments 5 ft. square and 4 ft. high. In the first room are images of Rama, Sita, and Lakshman. In the second is an image of Mahadeo, 6 in. high, which those three personages are said to have worshipped; hence arises the extreme sanctity of the place, which is quite one of the holiest in Nasik. The temple is said to be Nasik because Lakshman cut off Surpanakha's nose there. This hole is Sita's Gupha, or Cave, where she found an asylum until lured away by Ravana to Ceylon. Near it is the great temple dedicated to *Kala Rama*, or "Black Rama," which cost

£70,000. It stands in an oblong stone enclosure, with ninety-six arches. To the W., up stream, and just before reaching the river-side, is the oldest temple in the place, *Kapaleswar*, "God of the Skull," a name of Siva. The ascent to it is by fifty stone steps. It is said to be six hundred years old, but is quite plain and unattractive. Opposite to it the river foams and rushes in a rocky bed. Rama is said to have passed his long banishment at Nasik. Rama's Kund is the place where the god is said to have bathed; hence it is specially sacred, and bones of the dead are taken there to be washed away. Opposite to it and in the river itself is a stone dharmasala, with several arches, roofed over, in which ascetics lodge when the water is low. Down the stream, about 20 yds., are three temples erected by Ahalya Bai (pp. 123-4). The first is only a few feet high and long, but the next is a large square building, with a stone foundation and brick superstructure, dedicated to Rama; N. of it is a long dharmasala, and a little down the stream is the third temple, all of stone. About 200 ft. down the stream is Naru Sankar's temple, with an elaborately carved portico and a large stone enclosure, the last of the temples immediately on the water on the *Panchavati* side. At the E. end of the city on the S. bank is the hill of Sunar 'Ali, and another called *Junagarh*, or Old Fort, on which is a square building, in which Aurangzeb's chief officials used to reside. They command fine views over the city. West of these are the *Jami Masjid* and the *Sarkar Wada*, an old palace of the Peshwa (Chief of the Mahrattas), at present used as a school. Its beautiful carved woodwork has been removed; there are fine examples of woodwork in the town.

Sharanpur is the seat of the

mission founded by the Church Missionary Society in 1835, in the Junawadi part of Nasik, and moved by Mr W. S. Price in 1855. There was connected with this mission an African Asylum for youths rescued from slavery, and it was from here that Livingstone's *Nasik boys* were drawn. It was closed in 1875, and Mr Price took the boys to the E. coast of Africa, where a colony is established for redeemed slaves. A new church was built here in 1898.

The group of twenty-three Buddhist Caves, called Pandu Lena, which vary in age from the 1st century B.C. to the 2nd century A.D., and some of which were altered in the 6th or 7th century of our era, lie 5 m. to the S.W. of Nasik, on the Bombay road. They are on the easternmost of the three conical peaks which form the extremity of the Trimbak range. The caves include three large viharas or halls, and one fine chaitya or chapel, and are excavated at the back of a terrace 350 ft. above the level of the plain. The path to the caves,¹ which are numbered from W. to E., reaches the terrace about the middle of them.

Nos. 1 and 2 are damaged and unimportant. No. 3 is a large vihara, measuring 41 ft. by 46 ft. and having a stone bench and eighteen cells round the sides and end walls. In the veranda, behind a decorated screen rail, are six octagonal pillars, carrying four elephants, or bullocks or horses, on their capitals; and above these is a frieze of rail pattern, with a band of animals at the bottom of it. The sculptured door leading into

the cave resembles the gateways of the Sanchi tope (p. 137); over it are the three Buddhist symbols of the Bodhi tree (p. 51), the dagoba or tope, and the chakra or wheel of the law, and on each side of it is a guardian dwarfpal. In the centre of the end wall of the cave is a large relief of a dagoba. The details of this cave and of No. 10 are almost identical, but the latter is of much earlier date; the carved screens and rail patterns in both of them are specially noticeable. No. 4 is another damaged cave; the next five are marked only by simple rail or other decoration. The vihara No. 10 measures 43 ft. by 45 ft.; it dates from shortly after the Karli Cave (p. 462), and the carving in it is much more graceful and pleasing than that in the copy of it, No. 3. No. 11 is a small vihara with six cells off it; the chambers Nos. 12-14, now forming a group, were probably once separate, each forming a small hermitage. Nos. 15 and 16 are much damaged. No. 17 is a smaller vihara, measuring 23 ft. by 32 ft. The veranda, which is borne by octagonal columns, with elephants and riders, is approached by a flight of steps at one end of it and not in the centre; on the wall of the back aisle, separated from the cave by similar columns, is a large seated image of Buddha. No. 18 is the Chaitya Cave, the oldest of the group, and nearly contemporary with that of Karli. The front, which is decorated with Buddhist railings, dagobas, serpents, and chaitya windows, is extremely effective; the elaborate carving in the head of the doorway under the great window, which is finished with a representation of wooden beams, simulates the wooden framework with which such windows were once fitted. The interior measures 39 ft. by 22½ ft. by 23½ ft., and is divided by two rows of five plain octagonal columns into a nave and two aisles; at the

¹ The detailed account of these caves, as well as those of Ajanta, Ellora, etc., is taken mainly from the monumental work on the *Cave Temples of India*, by Fergusson and Burgess, published by order of the Secretary of State for India. Those who are specially interested in the subject will find the original work indispensable.

end of the nave five more columns run round the back of a dagoba 6½ ft. high and 5½ ft. diameter. No. 20, at a lower level, is a small vihara with six side cells. No. 21 is the third largest vihara, measuring from 37½ ft. to 44 ft. across and 61 ft. deep. The veranda is carried by four octagonal columns, with bell-shaped capitals. On either side of the hall are eight cells, and in the end wall are three cells and an antechamber, from which two more cells open; all three walls are faced by a low bench. The antechamber to the shrine has two carved columns; the door of the latter is flanked by two gigantic dwarapals. Inside it is a colossal seated image of Buddha, 10 ft. high, attended by two *chauri*-bearers. Nos. 22 and 23, at the extreme east end of the terrace, are both much damaged; the last and No. 2 are Mahayana caves, the rest being older Hinayana works. In addition to the caves, there are a number of cisterns on the terrace, which affords beautiful views of the country round Nasik.

On the road to Trimbak from Nasik (19 m. by road) are several stone-faced wells, and at Prayag Tirth, on the right of the road, is a beautiful tank lined with stone, and with stone steps and two small pagodas built by Ahalya Bai. Near Anjanneri two conical hills, about 900 ft. high, face each other on either side of the road. From these the hills run in fantastic shapes to Trimbak, where they form a gigantic crescent from 1210 to 1500 ft. high. Below this mountain wall, which has near the top a scarp of about 100 ft., is the small town of about 4000 inhabitants. It derives its name from *Tri*, "three" and *Ambak*, "eye," "the three-eyed" being a name of Siva. The Fort stands 1800 ft. above the town, and 4248 ft. above the sea. The Temple of Trimbakeswar, which is on the E.

side of the town, not far from where the Nasik road enters, was built by Balaji Baji Rao (1740-1761), third Peshwa. It cost £90,000. It stands in a stone enclosure, which has no corridor, but a portico, which is the music gallery, and is 40 ft. high. The ascent is by steps outside, and strangers are permitted to mount in order to look into the interior of the temple, which none but Hindus may enter. A flight of six hundred and ninety steps up a hill at the back of Trimbak leads to the sacred source of the river Godavari, where "the water trickles drop by drop from the lips of a carven image shrouded by a canopy of stone" into a tank below. This is the sacred bathing-place of pilgrims, and is called the Kushawart. Bathing is said to cleanse from the worst sins. At the S. end is a temple to Siva.

147 m. Lasalgaon station. From this place *Chandor*, an interesting town overhung by a fine hill-fort, is 14 m. N. by a good road. The Maharaja Holkar is hereditary Patel of Chandor. The fort was taken by the British in 1804, and again in 1818.

162 m. Manmar junction station, D.B. (R.). This is the junction of the Dhond and Manmar Railway, which forms a chord line between the N.E. and S.E. branches of the G.I.P.R., and of the Godavari Valley branch of the Hyderabad State Railway to Secunderabad (Route 6). About 4 m. S. are the Ankai Tankai Fort, now in ruins, and seven Buddhist caves of some interest. Between the caves and the station rises a curious hill called Ram Gulni, surmounted by a natural obelisk of trap rock 80 or 90 feet high.

204 m. Chalisgaon station, branch to 35 m. Dhulia (population, 30,800), headquarters of the West Khandesh District. There

is a good D.B. at Dhulia sufficient to accommodate two travellers. It is a stage (110 m. from Dhulia to Kalghat on the Narbada, which can be crossed October to June by a trestle-bridge, passable to motors) on the way to Agra and Delhi. Petrol can be obtained at Dhulia. Dhulia is connected by a motor-car service with Nardana on the Tapti Valley Railway, 20 m. along the Agra road, N. An Inspection Bungalow at Kalghat.

261 m. **Jalgaon junction** (D.B. khansama, and supplies) of the Tapti Valley Railway (p. 165), and the best station to start from for a visit to the Ajanta Caves (Route 3); is the headquarters of the lately-constituted East Khandesh District (population, 1,034,886). It is the richest, one of the largest, most populous and important in the Bombay Presidency. Formerly the haunt of aboriginal hill-tribes and wild tribes, it has now become a prosperous and fertile cotton-growing district, with innumerable cotton-gins and presses, two High Schools, and many advanced institutions. But in the hills that enclose it in the N., E. and S., the tiger and leopard still roam in numbers: bears are to be found. Sambhar and spotted deer are to be shot. The new headquarters offices of the District and other buildings are fine. There is a large cotton-spinning mill in the town. A Civil Hospital has been built by public subscription in memory of his late Majesty Edward VII. Connected with it is a District Nursing Association, with a capital, publicly subscribed, of Rs. 80,000, to supply nurses to this hospital and to district dispensaries. The Bank of Bombay has a branch at Jalgaon: there is also a Central Co-operative Bank.

276 m. **Bhusawal junction station** (R.). (A D.B. available with

permission of the Exec. Engr., E. Khandesh; no servants or supplies.) An important railway colony called into existence by the G.I.P.R. works. Population, 16,363. Junction between the G.I.P.R. main line and the Nagpur Branch (Route 7).

North of Bhusawal the railway passes between the Satpura and Vindhya ranges on the W. and the Mahadeo Hills of the former on the E.; these ranges constitute the geographical divisions between Hindustan (N. India) and the Deccan or South-country.

Amalner junction station, 51 m. from Bhusawal, 160 m. from Surat. (Population, 12,300.) It has a High School and an Indian Institute of Philosophy, and a cotton-mill: an important commercial centre.

278½ m. the **Tapti Bridge**, one of the most important works on the line. The first bridge built was abandoned in consequence of the inferior nature of the stone of which it was constructed. The present bridge has recently been widened and strengthened by the G.I.P. Railway Company.

310 m. **Burhanpur station**. There is a very fine and well-found D.B. in the palace, part of which has been restored for the purpose. Burhanpur is a centre of the gold and silver wire industry, the drawing of which from ingots is an interesting operation, and can be seen by arrangement. The city, which is about 3 m. distant, has a population of 32,000. It has been a place of much importance, and is completely walled in. The wall was built by Nizam Asaf Jah in 1731. The neighbourhood contains some interesting Muhammadan ruins and a curious aqueduct still in use. In the town are two handsome mosques—the Jami Masjid and the Bibi Masjid. The *Badshahi Kila*

—a ruined citadel and palace—is beautifully situated on a height overlooking the Tapti river. The Mughal water-works form, perhaps, the most important monument of the past glory of Burhanpur. They were constructed for the most part between 1618 and 1650. The place was founded in 1400 A.D. by Nasir Khan of the Farrukhi Dynasty of Khandesh, and was annexed to the Mughal Empire by Akbar in 1600 A.D. It was the capital of the Deccan Province of the empire when in 1614 A.D. Sir Thomas Roe, ambassador from James I. to "The Great Mogul," passed through, and paid his respects to the Viceroy Prince Parvez, son of Jahangir, and it was here that Shah Jahan's wife, the "Lady of the Taj," died in 1629. The place was occupied by the army under General Wellesley on 16th October 1803, given back to Sindhia the next year, and finally passed to the British in 1860. It is now British territory. The principal handicraft of the town is the production of silk cloth embroidered with gold and silver lace, which continues now in the same manner as described by Tavernier in 1658. The town has also a spinning and weaving mill, and several ginning and pressing factories.

322 m. from Bombay is Chandni station, about 7 m. by road from Asirgarh, a very fine hill fort, a conspicuous object from the railway, standing at an elevation of 2300 ft. above sea-level. The fortifications were breached and the fort captured on 21st October 1803 by Colonel Stevenson, and on 9th April 1819 by the British, under General Doveton. Historically it is one of the most important forts, being on the main line of communication with the centre of India. Until of late years it was garrisoned, but the barracks are all dismantled now, and some interesting cannon were removed

to Nagpur. At certain times the fortifications are beset by bees, which are very dangerous. A conveyance must be arranged for from Burhanpur, and it is best to visit it from there, as very few trains stop at Chandni. The expedition is a very interesting but tedious one, and involves a climb of well over 1000 ft. The fortifications and gateways are in a very good state of preservation.

353 m. Khandwa junction station, D.B. (R.). A civil station, the headquarters of the district of Nimar in the Central Provinces. Khandwa was created a municipality in 1867. It has a population of 21,604. The town is supplied with water from Mohghat reservoir, situated at a distance of 4 miles. Khandwa is a place of considerable antiquity. Four kunds or small tanks, with stone embankments, have been constructed round the town in the direction of the four points of the compass. On the bank of each tank is a temple, but only one of them is in use. One of the temples at Rameswar has the appearance of a cave. The town has a D.B., constructed a few years ago. It has a town hall and a Government High School. It is a centre for the export of raw cotton, and contains several ginning and pressing factories. From here the metre-gauge system of the Bombay, Baroda, and Central Indian Railway runs N. to Mhow, Indore, and through Western Malwa to Ajmer, and thence to Agra, Delhi, Ferozepore, and the Panjab. (See Routes 8 and 10).

417 m. Harda station, D.B. close to station, good (population 16,300). Headquarters of a Sub-divisional Magistrate, and an important mart for the export of grain and seeds. Here the railway enters the great wheat-field of the Narbada Valley, which extends to Jubbulpore. There

is a good road, which leads to Indore, crossing the Narbada river at Handia.

464 m. Itarsi junction station, D.B. (R.). From this the system of the Indian Midland Railway runs N. to Hoshangabad, Bhopal, Jhansi, Gwalior, Agra, and Cawnpore (see Route 9). A railway is under construction by the G.I.P. Co. from Itarsi to Nagpur (p. 114).

It will traverse the small District of Betul, on the Satpura plateau, and join the B.N.R. at Nagpur. The section between Itarsi and Betul (the District headquarters) is complete. The line has also been carried Westwards beyond the District border, so as to connect with the narrow-gauge B.N.R. system; but some years will still elapse before the section from Amla junction (in Betul District) and Nagpur is completed.

The District is cool but malarious: in the open portion the elevation varies from 1500 to 2200 feet. In the E. and S. the hills are much higher, the Khamla plateau in the S.W. corner being 3787 ft. above sea-level. The open tract lies in the centre of the District, and grows wheat as its chief crop; surrounding this tract the country is very broken and clad with forest. Streams of some merit, notably the Tapti, have their source at the top of the plateau, and find their way to the plains below through rocky valleys, often of great beauty. The heavy forest in the outlying portions of the district still provides fair big-game shooting, though it has seriously deteriorated in recent years, and is hard to reach owing to the broken character of the country. The small-game shooting is of the poorest, far worse than that in adjoining Districts below the ghats.

Betul is connected with Ellichpur, Chhindwara, Itarsi and Nag-

pur by metalled roads. Along all these roads there are good rest-houses, or inspection bungalows, 8 or 10 m. apart, but they are in charge of *chaukidars* only, and visitors must arrange to bring their own food and servants with them. The only complete D.Bs. are at Shahpur (on the Itarsi road) and at headquarters.

At Betul there is the usual civil population. There is a small Club, with a billiard-table, and golf links. When the railway has been completed the district will be well worth a visit, if only for its scenery; the ghat sections, where the line enters and leaves the plateau, afford a most pleasant prospect, especially at the end of the rains or in the early cold weather.

The only buildings of interest are the Jain temples at Muktagiri, close to the Ellichpur road on the Berar border. They are worth inspection, but are best reached from Ellichpur. Thirty-six per cent. of the population of the District are aboriginals.

505 m. Piparia station. There is a comfortable D.B. close to the station. A good road leads in 32 m. S. to Pachmarhi, the hill-station of the Central Provinces. There are many bungalows at Pachmarhi and barracks, which are occupied by a musketry class, and are available for European troops if required. The station is 3500 ft. above sea-level. There is a D.B. on the way at Singhanama; the ascent from here, which is 12 m. long, is very pretty. Good large-game shooting in the forests below the station by special arrangements with the Forest Department beforehand. During the season, and out of the season, motor-cars are usually available at Piparia; the mail-contractors also supply cars on hire: rates generally are Rs. 8 per seat; otherwise tonga transport, which must be ordered beforehand from Pach-

marhi—this also applies to the cars. There is a well-found little hotel called the Hill Hotel (a converted D.B.) close to the Club, which admits visitors for limited periods. The scenery is very fine, and there are numerous roads and drives leading to view points.

A visitor would do well to take his own motor-car, as the road up to Pachmarhi is perfect, and it will be very useful on the plateau. As the accommodation is strictly limited and in great demand during the season, it is not safe to trust to finding it, without ascertaining beforehand if it is available.

536 m. **Gadarwara** junction station. A railway 12 m. long leads S. to the Mohpani coal-mines, worked by the Great Indian Peninsula Railway.

Between 590 m. **Bikrampur** and 597 m. **Shahpura** the railway crosses the Narbada river.

616 m. **JUBBULPORE** station.* 733 m. from Calcutta by Allahabad route (R.). An important civil and military station, the meeting-place of the G.I.P. and East Indian Railways. A new railway line runs to Nainpur (whence there are branch lines running to Seoni, Chhindwara and Mandla), 69 m. S. of Jubbulpore, and 73 m. farther on to Gondia junction, on the Bengal-Nagpur line, 61 m. east of Bhandara Road (p. 116). The town is about a mile from the railway station and divided from the cantonment by the railway: conveyances at the railway station.

The town (population, including cantonments, 100,651) and station are well laid out and well cared for. The Victoria Town Hall has a statue of the Queen Empress. There are Protestant and Roman Catholic churches, six High Schools and two colleges (Robertson College and Training College.

The former is a fine building near the gun-carriage factory). It is the headquarters of the Brigadier-General of the Narbada District; the garrison is a strong one of all arms.

A mile N.E. of the railway station is the Government gun-carriage factory. In or near the town there are a cotton-mill, two pottery works, and a glass factory. Close to the railway station is a well-furnished *dharmshala*, named after the late Raja Gokuldass, whose statue is placed in front of the building.

In the administration of India by the English few subjects have created more interest than the suppression of the Thags (*Thugs*), a fraternity devoted to the murder of human beings by strangulation. The principal agent in hunting down these criminals was Colonel Sleeman,¹ and it was at Jubbulpore that a number of Thag informers and their families were formerly confined,² and the once famous "School of Industry," now used as a reformatory school, was established in 1835. Originally there were 2500 of these people in confinement here. Tents, carpets, coarse cloth are made here for sale.

Jubbulpore (1306 ft.) ranks as the second city in the Central Provinces, and is generally considered as the most desirable of the plain stations. The soil is sandy, and water is plentiful near the surface. The station is well planted with trees, and the climate is comparatively cool.

Archæology of the District.—At Rupnath, 3 m. from Bahuri-

¹ Colonel Sir W. Sleeman's *Rambles and Recollections of an Indian Official and Diaries in Oudh* are among the most fascinating books ever written on India. Meadows Taylor's *Confessions of a Thug* is the finest of all his works.

² The Thagi Reformatory was closed in 1889.

band, and about 19 m. from Sihora railway station, there is a rock edict of the Emperor Asoka, engraved about 232 B.C. It is the oldest inscription, and the only one of its kind, in the Central Provinces.

At Bahuriband (17 m. from Sihora) is a Jain statue 12 ft. high. This place is believed to be the Tholobana of Ptolemy. Many ruins of temples are found here. A Sati pillar, dated 1298 A.D., may also be seen.

At Bargaon (6 m. from Salaiya station, on the Katni-Bina line) is a temple dating from the 5th or 6th century A.D. A number of other ruins—Brahmanical and Jain—are about a mile to the west; on the banks of the Katni river are more remains. The stones are beautifully carved.

At Bilahri, 8 m. S.W. of Murwara, images and sculptured stones are scattered all about the village and built into the houses, but few temples now remain. A small fort, partly destroyed during the Mutiny, may be seen.

Expedition to the Marble Rocks Gorge of the Narbada.

The Marble Rocks, known to natives as Bhera Ghat, which are 12 m. from Jabulpore, are well worth a visit. Tongas can be hired for the trip, and the road is first-class metalled. About $4\frac{1}{2}$ m. to the W. is a remarkable ancient fortress¹ of the Gond Kings, perched on the summit of a huge granite boulder. At $9\frac{1}{2}$ m. a branch road turns to the rocks, the last half m. being often impracticable for vehicles after rain. On the high ground above the lower end of the right side of the gorge are two small D.B.s. and

a number of houses, and 100 yds. beyond the bungalow is a flight of 107 stone steps, some of them carved, which leads to the *Madanpur Temple*, surrounded by a circular stone enclosure. All round it are figures of the sixty-four Joginis. Though much mutilated, they are well worth a visit. Three-quarters of a m. beyond the temple hill the Narbada may be reached above the gorge at the point where its waters plunge down the Dhuándhar or Smoke cascade into the cauldron at the upper end of the Marble Rocks. In a recess below the bungalow is the embarkation place for a trip by boat up the gorge. Two men to row and one to steer are enough. The white cliffs of magnesian limestone are only 90 ft. to 105 ft. high, but the effect of the gleaming faces and rifts is extremely picturesque, especially under moonlight; the water is said to be 150 ft. deep in places. Near the entrance to the gorge, which is about 1 m. long, is a spot named the "Monkey's Leap." Farther on is an inscription cut on the right side by order of Madhu Rao Peshwa, and near the end of the gorge are some curiously-shaped rocks called the Hathi ka paon, or Elephant's Foot. The gorge is closed by a cascade waterfall over a barrier of rocks. There are usually large nests of wild bees on the rocks, and care must be taken not to excite them by smoking or firing guns. Near the landing-place is a memorial of a young engineer officer who was drowned in seeking to escape the attack of infuriated bees.

673 m. Katni junction station. Line S.E. to the coal-fields at *Umaria*, 49 m., and thence to Bilaspur on the Bengal-Nagpur Railway (p. 119). Line W. to Saugor (p. 143). The town is famous for the manufacture of limestone and the preparation of stone slabs. There is also a cement factory close to the town.

¹ Known as the Madan Mahal.

734 m. **Satna** station, a Government D.B. (R.). A town in the Rewah State, also the headquarters of the Baghelkhand Political Agency. A good motor road runs E., connected with the Great Deccan Road (21 m.), whence Rewah (31 m.) and Govindgarh (35 m.) can be reached. To the W. is a good motor road through the Bundelkhand Agency to Jhanbi. Near Satna were found the remains of the Bharhut stupa, removed to the Calcutta Museum (p. 83).

782 m. **Manikpur** junction station. From this place the Indian Midland line runs W. to Jhansi, 181 m. (Route 9 (c)).

840 m. **Naini** station (R.). Close by is the Jail, one of the largest in India; there are also a Leper Mission and Asylum here. 2 m. farther the line crosses the Jumna by a fine bridge, 3235 ft. long (consisting of fourteen spans of 200 ft. and three of 30 ft., which cost 44½ lakhs, and was opened on 15th August 1865), and enters

844 m. **ALLAHABAD** station * (lat. 25° 26', long. 81° 55'), 514 m. from Calcutta. The capital of the United Provinces (population 171,697) is situated 316 ft. above sea-level on the left bank of the Jumna, on the wedge of land between it and the Ganges, which the Curzon Bridge (on the O. and R. Railway) and new Bengal and N.W. Railway bridge (of the Bengal and N.W.R. to Jaunpur and Benares) cross N. and E. of the city. It is the headquarters of the General commanding the Allahabad District, and there is a strong garrison.

The Fort stands near the junction of the two rivers. The Civil Station, Cantonments, and City stretch W. and N.W. from this point 6 m. The present Fort and City were built by Akbar in 1583 A.D., but the Aryans pos-

sessed a very ancient city here called Prayag, which the Hindus now call Prag (place of sacrifice). It is a very sacred place with them, as they believe that Brahma performed a sacrifice of the horse here, in memory of his recovering the four Vedas. The town was visited by Megasthenes in the 3rd century B.C., and in the 7th century A.D. Hiuen Tsang, the Buddhist pilgrim, visited and described it. It was first conquered by the Moslems in 1194 A.D., under Shahab-ud-din-Ghori. It received the name of Allahabad in 1584 A.D., and was made the capital of a Province. At the end of Akbar's reign Prince Salim, afterwards the Emperor Jahangir, governed it and lived in the Fort. Jahangir's eldest son, Khusru, rebelled against him, but was defeated and put under the custody of his brother Khurram, afterwards the Emperor Shah Jahan. Khusru died in 1615, and the *Khusru Bagh* (see p. 42) contains his mausoleum. In 1739 Allahabad was taken by the Mah-rattas, who held it till 1750, when it was sacked by the Pathans of Farrukhabad. It changed masters several times, and in November 1801 it was ceded to the British, the Fort having been held by them since 1798.

Allahabad was the seat of the Government of the N.W. Provinces from 1834 to 1835, when that was removed to Agra. In 1858, after the suppression of the Mutiny, the Queen Victoria's famous Proclamation of 1st November, assuming the government, was read out at Lord Canning's Darbar. It again became the seat of the Provincial Government, of which the title was changed to that of the United Provinces of Agra and Oudh in 1902. The present Lieutenant-Governor is the Honourable Sir Harcourt Butler, K.C.S.I. Previous Lieutenant-Governors have been Mr Thomason (1843-53), Mr J. R.

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In the spring of 1857 the station, with its magnificent Arsenal and strong Fort, was garrisoned by a single Sepoy Regiment, the 6th, to which, on 9th May, a wing of the Ferozepore Regiment of Sikhs was added. The officers of the 6th N.I. were confident in the loyalty of their corps, but fortunately a few days later sixty British invalid soldiers were brought in from Chunar. On 5th June most of the Europeans in the place moved into the Fort, thus adding about 100 volunteers to the garrison. The next day the 6th N.I. mutinied and murdered their officers and seven young ensigns who had been posted at Allahabad to learn their drill. The eighty men of the regiment on duty at the main gate of the Fort were at once disarmed by a fine display of boldness, the 400 Sikhs remaining staunch, under the influence of their C.O., Captain Brasyer, though they wavered for a moment. Outside the Fort anarchy reigned in the city—the jail was broken open, and the prisoners murdered every Christian they met. A Muhammadan Maulvi was put up as Governor of Allahabad, and took up his quarters in the Khusru Bagh. On the 11th of June General Neill arrived in the Fort, and on the morning of the 12th burned Daraganj and got possession of the bridge of boats. On the same day Major Stephenson, with 100 men of the Fusiliers, arrived. General Neill then scoured the neighbouring villages, and produced such a terror in the

city that the inhabitants deserted *en masse*, and the Maulvi fled to Cawnpore, and on the 17th June British authority was re-established in the city. General Havelock arrived at Allahabad on 30th June, and left for the relief of Lucknow on 7th July.

The Khusru Bagh, close to the railway station, is entered on the S. side by an old archway, nearly 60 ft. high and 46 ft. deep, overgrown with creepers. Within the well-kept garden are three square mausolea. That to the E. is the tomb of Prince Khusru, W. of it is the grave of a sister of his, and W. again that of his mother, a Rajput lady. They are shaded by some fine tamarind trees. The mausoleum of Khusru has been very handsome inside, and is ornamented with many Persian couplets, and with paintings of trees and flowers, which are now faded. The cenotaph of white marble is on a raised platform, without inscription. To the right and left two of Khusru's sons are buried. All three mausolea have recently been put into a thorough state of conservation.

E. of the gardens is the native city, containing some picturesque corners. On the other side of the railway lies Canning Town, the older European quarter, laid out amongst a network of wide avenues. The new High Court and All Saints' Cathedral, a fine 13th-century Gothic structure, 225 ft. long by 40 ft. broad, built of red and white stone, are near the railway station. The throne is a memorial of Bishop Johnson of Calcutta and Metropolitan of India (1876-98). There are memorial windows of Sir John Woodburn, Lady Muir, C. J. Connell, and others. Trinity Church lies N.E. of the Alfred Park (made in honour of the Duke of Edinburgh's visit in 1870). It contains a tablet, which is valuable as a historical record of those who

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perished in the Mutiny. The Roman Catholic Cathedral, in the Italian style, is W. of the Alfred Park, and near it are the Club, the Mayo Memorial Hall, and the New University Buildings. There is also the Macpherson Park in Cantonments.

In the Alfred Park is also the Thornhill and Mayne Memorial, with a fine public Library. Beyond the park is the Government House, and to the N. of the Alfred Park is the Muir College, a fine building in the Saracenic style. Close by to the W. is the *Mayo Memorial Hall*, a fine structure, with a tower 147 ft. high. The Empress Victoria memorial statue, also in the Alfred Park, is a seated marble figure under a stone canopy. It is intended that the U.P. Memorial of King Edward shall take the form of a hospital for consumptives in the hills.

The Fort, built by Akbar in 1583 A.D., forms a striking object from the river, but its "high towers have been cut down, and the stone ramparts topped with turfed parapets, and fronted with a sloping glacis." The changes rendered necessary by modern military exigencies have greatly detracted from its picturesqueness as a relic of antiquity. The principal gateway is capped with a dome, and has a wide vault underneath it. It is a noble entrance. The walls are from 20 ft. to 25 ft. high; below them is a moat, which can be filled with water at any time. Within the enclosure lie the officers' quarters, powder magazine, and barracks. Access to the *Zenana* building of the old Palace, though enclosed by the Arsenal, is now possible, thanks to the care of Lord Curzon, by permission of the Local Military Authority. "A square hall, supported by eight rows of columns, eight in each row, thus making in all sixty-four, surrounded by a deep veranda of

double columns, with groups of four at the angles, all surmounted by bracket capitals of the most elegant and richest design, and altogether as fine in style and as rich in ornament as anything in India." The building has now been put into a thorough state of repair, and the wooden excrescences which formerly almost entirely concealed it have been removed.

Asoka's Pillar.—In front of the gateway inside the Fort is the Asoka Pillar, which rises 35 ft. above ground. It is of stone, highly polished, and is of much interest on account of its great antiquity. It was found lying on the ground in the Fort in 1837, and was then re-erected. On it are inscribed the famous Edicts of Asoka (issued about 242 B.C.), and also a record of the victories (about 340 A.D.) of Samudragupta (*circ.* 326-375 A.D.), and one by Jahangir (1605-27), to commemorate his accession to the throne. There are also minor inscriptions, beginning almost from the Christian era. According to Mr James Prinsep, who deciphered this and other Asoka inscriptions in 1838 (p. 88), the insertion of some of these inscriptions shows that the pillar was lying on the ground when they were cut.

The Akshai Bat (Vata) or undying banyan.—Hiuen Tsang, the Chinese pilgrim of the 7th century (629-45 A.D.), in describing *Prayag*, gives a circumstantial description of the undecaying tree. In the midst of the city, he says, stood a Brahmanical temple, to which the presentation of a single piece of money procured as much merit as that of a thousand pieces elsewhere. Before the principal room of the temple was a tree surrounded by the bones of pilgrims

¹ *History of Indian and Eastern Architecture*, by J. Fergusson, J. Burgess, and R. P. Spiers, 2, 298.

who had sacrificed their lives there.

The tree is situated under the wall of the Palace, and is reached by proceeding straight on from the pillar. Close by is a deep octagonal well flanked by two vaulted octagonal chambers. A few steps lead to a dark underground passage, which goes 35 ft. straight to the E., then S. 30 ft. to the tree. As no tree could live in such a situation, the stump is no doubt renewed from time to time. There are some idols ranged along the passage. In the centre of the place is a lingam of Siva, over which water is poured by pilgrims. General Cunningham, in his *Ancient Geography of India*, gives an interesting sketch of the probable changes in the locality, and concludes: "I think there can be little doubt that the famous tree here described is the well-known Akshai Bat or undecaying banyan tree, which is still an object of worship at Allahabad."

The ramparts at the N.E. side of the Fort afford a fine view of Tribeni Ghat, the Confluence of the Ganges, which is $1\frac{1}{2}$ m. broad, flowing from the N., with the Jumna, $\frac{1}{2}$ m. broad, flowing from the W., and the Saraswati. The Ganges is of a muddy colour, the Jumna is bluer. The Magh Mela, a religious fair of great antiquity, to which Allahabad probably owes its origin, occurs every year about the month of January. On the chief day, called the Amáwas, of the fair, about 1,000,000 pilgrims bathe, in ordinary years, at the confluence of the sacred rivers: at the Kumbh Mela, held every twelfth year, the number of bathers on the Amáwas day is between 3,000,000 and 4,000,000. On ordinary days the attendance would, in ordinary years, be perhaps 20,000: in the Kumbh year it might be 200,000: but the figures vary greatly on festival

days, according to the importance of the latter.

The Akbar Band runs N.E. from the Fort to Daraganj. Here the Bengal and N.W. Railway crosses the Ganges by a fine bridge of 40 spans of 150 ft. each, to Jhusi, and runs 73 m. to Benares. Beyond the old Cantonment the railway line to Jaunpur, Fyzabad, and Lucknow (p. 374) crosses the Ganges by the fine Curzon Bridge.

W. of the Fort is the Minto Park, with the memorial (1910) of the Royal Proclamation of the assumption of the rule of India by the British Crown on 1st November 1858. It consists of a stone *lit*, with medallions of Queen Victoria and the late King Emperor Edward VII., surmounted by four lions bearing the Imperial coronet. Farther W. up stream of the Jumna Bridge is the Ewing Christian College of the American Presbyterian Mission.

At Allahabad several English and vernacular newspapers are published; of these the *Pioneer* is one of the best newspapers in India.

There are roadways on the E.I.R. and O. and R. Railway bridges, by which motors can pass. The bridge on the Bengal and N.W.R. to Fyzabad and Benares has no provision for road traffic. The old road to Rewah and Jubulpore is metalled only up to the tenth mile. There are several petrol shops in Allahabad, and motor cars can be repaired.

The following routes can be taken by motors from Allahabad:

- (1) To Benares, 78 m., and 45 m. on to Ghazipur;
- (2) to Jaunpur, 57 m., and 44 m. on to Mirzapur;
- (3) direct to Mirzapur, 57 m.

Bhita is 11 m. by road S.W. of Allahabad, and on the opposite side of the Jumna. Both Deoria and Bhita contain archaeological remains of considerable importance, which probably mark the site of an ancient city extending from the river bank inland for

about half a mile in a curved line to Bhita.¹ Recent excavations, conducted by Sir J. H. Marshall, Director-General of Archaeology, show that this was the site of a settlement from prehistoric ages, and that it was a fortified city from the Mauryan (321-184 B.C.) down to the Gupta (320-455 A.D.) epoch, when it appears to have been deserted and given over to the neighbouring jungle tribes, who were still in the neolithic state of culture. The city is surrounded by an earthen embankment surmounted by a brick wall, some 11 ft. in thickness, which was strengthened by bastions on the outer side and by guard-houses within. The circuit wall seems to have been pierced by three gateways—one on the west and one in the middle of the north-east and south-east sides. Arrow-heads of iron, and numerous sling or catapult balls of stone, marble, and earthenware have been found within the walls, the balls ranging in dates from the 7th or 8th century B.C. to the later Gupta period (455-606 A.D.). Nearly all the interior of the fort which has so far been excavated is occupied by bazars and houses of considerable size divided up into well-defined blocks by roads and narrow alleys. The most modern of the buildings belong to the later Gupta epoch, and are characterised by the smallness of their rooms and the poorness of their construction. Below these come structures of the early Gupta or Kushana (45-225 A.D.) period, which are largely constructed out of the remains of earlier structures. The latter, forming the third stratum, belong to times preceding the Kushana dynasty; while the fourth and the lowest series of houses belongs to the epoch of the Mauryas. In the debris of each of these strata numerous small antiquities have been found,

including coins, seals, sealings, jewellery, terra-cottas, and stone sculptures, which clearly and accurately define the successive periods of occupation. Before the Mauryan epoch kiln-burnt bricks do not appear to have been extensively used on this site, though here and there small fragments of walls testify to their manufacture being understood for two or three centuries previously. Floors of well-made concrete and of burnt clay, on the other hand, occur in the lower strata, which must go back some seven hundred or eight hundred years at least B.C., and associated with them are well-made vessels of grey and red pottery (frequently covered with a black metallic glaze), terra-cotta figurines, roof finials, and the like, which prove that even in those early ages the culture represented here was considerably advanced.

The brick buildings of the Mauryan and subsequent epochs are singularly well preserved, standing in some cases to a height of 10 or 11 ft., in spite of the fact that their walls are mainly built of a single thickness of brick laid in mud, and they are invested with particular interest as the first examples of complete domestic dwellings which have been excavated in India. Those of the Mauryan and Kushana period contain on an average about twelve rooms on the ground floor, ranged on the four sides of an open courtyard, with what appears to have been a covered veranda along one side, and one or more passages between the chambers giving access to the side streets. One of the corner rooms was utilised for stores or treasure, a deep chamber being sunk below the floor to a depth of as much as 30 ft. The walls of private houses which face the main street were not pierced with doors or windows, but presented a blank face on the ground floor and a solid projection, some 4 ft. thick or more, was

¹ G.A.S.R., iii. 47, x. 5; J.A.S.B., 1874, p. 100.

added in front of them for the purpose of strengthening the walls or of carrying a veranda above. The upper storeys were no doubt constructed largely of wood, and have completely disappeared; but, judging from the foundations, it may be surmised that they were confined to one side of the house only. The roofs were protected with terra-cotta tiles and ornamented with pinnacles of the same material, from which it may be assumed that they were pitched at an angle and not flat. A feature of some interest in the plans of these houses is their obvious similarity to the monasteries of the Buddhists, which we may now presume were copied from the domestic dwellings of the time. The shops, it may be added, consist of single rows of chambers facing the street, with a raised platform in front, such as are commonly seen in the bazars of to-day.

Among the antiquities recovered from these remains the most noteworthy are—seals of ivory, bronze, and stone, and sealings of clay, which furnish us with the names of the householders and of the places and people with whom they were in correspondence; coins of the Kushana Emperors of the North, of the Andhras of the South, and of the kingdoms of Avanti, Kausambi, and Ayodhya; terra-cotta statues and figurines, well-finished in colour, which portray in detail the costumes of the time; copper and earthenware vessels of manifold shapes and various fabrics; goldsmiths' utensils; toilet boxes of steatite and marble, personal ornaments of many kinds; to which may be added also a number of celts and stone implements belonging to the jungle tribes referred to above.

The trains to Calcutta run back across the Jumna to Naini, and thence to Mirzapur.

891 m. from Bombay, 458 m.

from Calcutta, Mirzapur station. D.B. and P.W. Inspection building; no hotel, petrol, or repair shops. An important, well-built city. Population, 32,332 in 1911; by a later census, 55,304. Before the opening of the East India Railway it was the largest mart on the Ganges for grain and cotton; but much of the trade is now diverted elsewhere. There are excellent sandstone quarries near, on which Government levies a royalty. Mirzapur is still noted for its brass industry, and for its carpets and rugs, dyed with old native vegetable dyes, which are very permanent. Shellac is prepared from stick-lac at eighty factories. There is a handsome river front, with fine ghats and temples, containing some beautiful carvings. The Civil Station is to the N.E. of the city. The Deccan Trunk road from Nagpur and Jubbulpore ends at Mirzapur, which is 242 m. from Jubbulpore and 102 m. from Rewah. This road is described as fit for careful slow motoring in the cold weather. Mirzapur to Jaunpur, 44 m.; to Allahabad, 57 m.

439 m. from Calcutta, *Chunar* (population about 10,000) has a famous old Fort commanding the Ganges. The Emperor Humayun (1530-56) took it in 1537, but Sher Shah Sur, the Afghan, recaptured it shortly after, and strengthened himself against Humayun. The British gained it after the battle of Buxar in 1764. It was to this fort that Warren Hastings retreated from Benares in 1781, after Raja Chait Singh's rebellion.

419 m. from Calcutta, *Mughalsarai* junction station (R.) for Benares Cantonment station, 10 m. distant (Route 4), across the Ganges, crossed by the Dufferin steel bridge, nearly $\frac{1}{2}$ m. long.

From Mughalsarai some of the

express trains to Calcutta now follow the Grand Chord route through Gaya to Asansol. The principal stations passed on the Grand Chord line are 63 m. Sasaram (p. 52), 77 m. Sone-East Bank (branch of 80 m. to Dalton-ganj), 127 m. Gaya (p. 50), 204 m. Hazaribagh Road, 232 m. Gomoh junction for the Bengal Nagpur Railway, and 287 m. Asansol (p. 54). From Dehri-on-Son there runs a light railway to the foot of the hills, where there is a station called Rohtas, the nearest railway station to Rohtasgarh, the famous fortress of the Emperor Sher Shah (1540 A.D.), which is well worth a visit. From Hazaribagh Road the civil station of that name is about 35 m. distant. Before reaching Chausa (983 m.) the E.I.R. crosses the Karamnasa R. ("destroyer of merit"), which divides the U.P. from Bihar and Orissa. It is believed that the water of this river, if it wets the feet of returning pilgrims, washes away all the merit gained by bathing in the Ganges at Benares.

411 m. from Calcutta, Buxar station, D.B., famous for the great battle won on 23rd October 1764 by Major Hector Munro against the Nawab Wazir of Oudh, Shuja-ud-daula, a battle which, more than Plassey, secured the English possessions in Bengal. It was desperately contended, and, while 850 were killed and wounded on the English side, the enemy lost over 2000 in killed alone, and 135 guns, and their whole camp. Buxar is also of interest as a place of pilgrimage, where King Ram Chandra of Ajodhya is said to have crossed the Ganges on his way to Mithila (Darbhanga District) for marriage. Here, it is believed, he killed a great demon-ess named Tarka: the place is visited by a large number of pilgrims. Between Buxar and Arrah, and about 3 m. from Raghunatpur, there is a temple of

Siva, where a very large fair is held twice a year.

368 m. from Calcutta, Arrah station, D.B. There are inspection bungalows at many places all over the District, available for travellers on payment of R.1 a day. The special interest that attaches to this spot centres round the defence of the "little house at Arrah" against the mutinous soldiers of Dinapore. The garrison of that place in May and June 1857 consisted of the 7th, 8th, and 40th Regiments of Indian Infantry, one company of European, and one company of Indian Artillery, and Her Majesty's 10th Foot, under the divisional command of Major-General Lloyd. On 26th July the N.I. troops mutinied and made off for Arrah, unpursued, as in the case of the Meerut mutineers. An unsuccessful attempt was made on the 27th to send troops up the river, and later, on the 29th, a small body of three hundred and forty-three Europeans and seventy Sikhs was despatched to Arrah by steamer, under Captain Dunbar, but was compelled to fall back the next day after having been caught in an ambuscade between the river bank and that place, only fifty men and three officers returning unwounded. For heroic conduct in this attempted relief the V.C. was conferred upon two volunteers of the Bengal Civil Service, Mr McDonell and Mr Ross Mangles. Private Dempsey, of the 10th, also won the same reward of valour by his brave conduct on this and on subsequent occasions. Meanwhile Major Vincent Eyre, of the Bengal Artillery, who had previously passed up the river to Buxar, had also learned of the attack on Arrah, and on 30th July advanced with one hundred and sixty men of the 5th Fusiliers, and forty Artillerymen with three guns, to the relief of the place, which lay 48 m. from him. On

the 1st August he had a severe engagement with the enemy at Bibiganj, 4 m. to the W. of Arrah town, which was only decided by a resolute bayonet charge; and on the morning of the 3rd he effected the rescue of the Arrah garrison. The little house at Arrah, which had been prepared and provisioned for defence by Mr Vicars Boyle, engineer of the railway then under construction, had on that date been held for a week by twelve Englishmen, supported by fifty of Rattray's Sikhs, against a body of two thousand mutineers and a large mob. The attack was commenced on 27th July, but the garrison, under the Magistrate - Collector, Herewald Wake, and Mr Boyle, met the assailants with so heavy a fire that they speedily fell back to the shelter of trees. On the 28th and 29th the enemy subjected the house to a continuous fire of miscellaneous missiles from two old guns, one of which was finally placed on the top of the larger adjoining house. On the 30th an effort was made to burn the defenders out, but this failed; and an attempt to mine the house was not carried to completion before the relief took place. Towards the end of the attack the provisions of the garrison began to fail, and they were obliged to sink a well 18 ft. deep inside the house to provide themselves with water. The house, which stands in the compound of the Judge, has been converted into an historical monument by Lord Curzon. It is nearly a square, and has two storeys, with a veranda on three sides, supported by arches, which the besieged filled up with sandbags. The lower storey, which is little over 10 ft. high, was held by the Sikh soldiers.

Arrah is on a branch of the *Son Canal*, the great irrigation work of South Bihar. A light railway from Arrah to Sasaram connects the Chord Line with the Grand Chord Line.

344 m. from Calcutta, Dinapore Cantonment.

338 m. from Calcutta, **Bankipore** junction station,* (R.), D.B. (six rooms and a central hall, close to the railway station, on the road to the Government House), the headquarters of the Lieutenant-Governorship of Bihar, Chota, Nagpur, and Orissa, and of the Patna district, and forming the western extremity of the city of Patna (station 6 m. farther E., 136,153 inhabitants, called by the natives Azimabad), which covers 10 sq. m., and with its suburbs extends 9 m. along the S. bank of the Ganges. The Chajju Bagh House, occupied by the Commissioner of Patna during the Mutiny, is now the Government House. The ancient city of Pataliputra (the Palibothra of the Greeks), on this site, the capital of Chandra Gupta (321-297 B.C.), Bindusara (297-272 B.C.), and Asoka (272-231 B.C.), extended 10 m. along the river and 2 m. inland from the river bank. The modern Bankipore contains nothing of much interest to the traveller, except a building called the Gola, which was built for a granary in 1786 "for the perpetual prevention of famine in these Provinces," but has never been used for that purpose, and only temporarily for the storage of grain. It is 426 ft. round at the base, built of masonry, with walls 12 ft. 2 in. in thickness, the interior diameter being 109 ft. It is about 90 ft. high, and might contain 137,000 tons. Inside there is a most wonderful echo, the best place to hear which is in the middle of the building. As a whispering gallery there is perhaps no such building in the world. The faintest whisper at one end is heard most distinctly at the other. As a curiosity, if for no other reason, the building should be kept up. The ascent to the top is by steps outside. Sir Jang

Bahadur of Nepal rode a pony up the steps outside to the top.

East of the Gola (a mile or more distant) is the fine building of the Patna College, and 3 m. E. of it again the Gulzarbagh quarter, in which the great opium manufactory and storehouses were situated. The Har-Mandir is a shrine specially revered by the Sikhs as the birthplace of Guru Govind Singh. There is a convent at Bankipore near the Civil Court Buildings, and the St Michael's School, at Kurji, is at the fourth mile of the Bankipore-Dinapore road. There are a Public Library, Young Men's Institute, and a General Hospital. In the city of Patna, at Gulzarbagh, is the Duchess of Teck's Hospital. The Government Press has been located in the old opium factory buildings at Gulzarbagh.

In the city proper, 5 m. from the Gola, and on the right side of the road near the Roman Catholic church, is the grave of the sixty English captives¹ murdered by Mir Kasim and Samru (p. 294) on 6th October 1763—a massacre avenged by the storm of the place exactly a month later.

Until its recent abolition Patna formed, with Ghazipur, the two agencies by which the Government monopoly of Bihar and Bengal opium was worked. This opium has been famous from time almost immemorial, and was for many years one of the principal sources of income of the E.I. Company. The area under poppy cultivation in Bihar was greatly reduced in late years under the recent agreements with China in 1907 and 1911 for the abolition of the use of the drug in that country. The Patna opium agency has been abolished, and the Gulzarbagh opium factory, in Patna, was closed in December 1911. Under the later agreement

44,600 chests of "provision" opium were exported in 1911, of which 30,600 were certified for admission into China, the remaining 14,000 being exported to other countries. The number of chests exported to China was to be gradually reduced until all export ceased in 1917. This arrangement has been carried out. China could claim this consummation by an earlier date if she could show that her native production of opium had been effectively suppressed throughout the country. The cultivation, as it still obtains in the Ghazipur agency, is carried out by a system of annual engagements and advances. The crop is sown in November and matures in February. The cultivation proceeds on the following lines: "The best soil for growing is loam, so situated that it can be highly manured and easily irrigated. The seed is sown in November. Several waterings and weedings are ordinarily necessary before the plant reaches maturity in February. After the plant has flowered, the first process is to remove the petals, which are used as coverings for the opium cakes. The opium is then collected by scarifying the capsules and scraping off the exudation next morning."

Bankipore is the junction for the Digha Ghat Branch; for the Bengal and N.W. Railway leading to Oudh; and the Patna Gaya Railway, S. (see next page 50).

282 m. from Calcutta, Mokameh junction station (R.). Line to the N., joining the Bengal and N.W. Railway. To the E., the loop line of the East Indian Railway, which leaves the main line at (262 m.) Lakhisarai junction station, runs along the banks of the Ganges *via* Jamalpur, Sahibganj, and Tinpahar to Khana (see p. 55), where it rejoins the main line.

¹ One of these, H. Lushington, aged only 26, who had already escaped from the Black Hole, slew three of his murderers before he was overpowered.

138 m. from Calcutta, **Madhupur** junction station (R.) of the Giridih Line

Expedition to GAYA.

57 m. from Bankipore.

The journey will chiefly repay the archæologist or the student of Buddhism. The district of Gaya, which was included within the ancient kingdom of Magadha, contains many places of great sanctity. The name Gaya is said to have been the name of an Asura, or giant demon, so holy that all who saw or touched him were admitted to heaven. The rocky hills which run out far into the plains of the Ganges Valley teem with associations, remains, sculptures, images and sites of the religion of Buddha, many of which have been diverted to new objects by modern superstition. There is a so-called Gaya black stone, of which ornaments, bowls, and figures of gods and animals, often purchased by visitors, are carved. The Barabar Caves, 16 m. north of Gaya, are considered to be among the oldest Buddhist monuments in existence. At the present day the chief pilgrims to the temple and sacred tree at Buddh Gaya are Buddhists from Tibet, Burma, and Ceylon, and devout Hindus from all parts of India, who come to pray for the souls of their ancestors in purgatory, as part of the general course of pilgrimage of which Gaya is the centre. There is a lengthy legend to the effect that Vishnu promised that the rock on which the old town now stands should be known as *Gaya-kshetra*, and that whoever offered funeral cakes and performed the funeral ceremonies there should be

translated with their ancestors to the heaven of Brahma: hence the peculiar sanctity of the locality. The Hindu pilgrim, before leaving his home, must walk five times round his native village, calling upon the souls of his ancestors to accompany him on his journey. There are forty-five places within an area of 35 sq. m. at which the pilgrim should offer funeral cakes, but they usually visit only seven and often only three of the forty-five. Arrived at Gaya, he is forthwith placed in charge of a special Brahman guide, with whom he makes the pilgrimage of the place, and he has to bathe in the sacred streams of the Phalgu and the Pūnpūn: nearly 90 per cent. of the population are Hindus.

Gaya. * 2 D.B. (which supply reasonably sufficient accommodation. There is a refreshment room at the station) 292 m. from Calcutta, is a city of 70,423 inhabitants. It is on the Grand Chord E.I. Railway from Calcutta to Moghalsara, and also connected with the main line E.I. Railway, by the S. Bihar Railway to Lakhsarai and the Patna-Gaya Railway to Bankipore. Being an important centre of Hindu pilgrimage, it is visited by about 300,000 pilgrims yearly. The temple of Vishnu Pad in the old portion of it is difficult to approach except on foot, owing to the extreme narrowness of the streets. A new carriage-road to the S. gate of the temple is, however, about to be constructed. The temple is an ugly octagonal building, about 100 ft. high, with many very clumsy mouldings: it faces E. with a very striking façade. In the centre is an octagonal basin, 4 ft. in diameter, inserted into the pavement and plated with silver, which surrounds the impress on the rock of the god's foot. The

Vishnu Pad (*Footstep of Vishnu*) is about 16 in. long, and 6 in. broad. Flower and other offerings are made to it. S. of the temple, almost touching it, is a handsome pillared hall or porch, with the pillars let into the solid rock. The temple is served by Brahmans known as Gayawals, the rich hereditary priests, to whom all final offerings of the pilgrims must be given. They possess the exclusive privilege of blessing the pilgrims, without which their visits would be ineffectual.

Buddh Gaya is 7 m. S of Gaya. There is a good metalled road leading up to it. The origin of the **Temple of Buddh Gaya** is of great antiquity (543 B.C.), and is closely connected with events of the life of Buddha. It seems to be built in a hollow (the result of excavations: it was built on the flat), which diminishes its apparent height, and is also shut in by small houses. The figure of Buddha, which, according to Hiuen Tsang, was of perfumed paste, was destroyed centuries ago. Other figures of plaster were subsequently made and also destroyed. To the left is the place where the founder of the present College of Mahants, about 250 years ago, performed *Tapasya*—that is, sat surrounded by four fires, with the sun overhead. The ashes were preserved in a hollow pillar.

Much of the stone railing, which was once supposed to be the work of King Asoka, but is now known to be of a date 100 years later, has been restored to the position which it is supposed to have occupied round the original structure. It has four bars of stone, supported by pillars at intervals of 8 ft. The top rail is ornamented with carvings of mermaids, or females with the tails of fish inserting their arms into the mouths of Makaras—that is, imaginary crocodiles, with large ears like those of elephants

and long hind legs. Below this top bar are three others, also of stone, ornamented with carvings of lotus flowers. The pillars are adorned with carvings of various groups—such as a woman and child, a man with a woman who has the head of a horse, Centaurs, and so on. Several additional pillars have been lately recovered and erected in their places. Mr Fergusson¹ pronounces this to be “the most ancient sculptured monument in India.” The plinth of the temple is 26½ ft. high, and at the top of it is a clear space 13 ft. broad, which allowed a passage round the tower. At each corner of the platform was a small temple, and outside the rail (erected during the Sunga period, 184-72 B.C.) were many subordinate temples. Behind the temple, on a raised platform, is the sacred Bo-tree (a pipal or *Ficus religiosa*) under which Buddha sat. The numerous figures and votive models of the temple and of stupas all round the shrine are of late date—i.e., about 800-1000 A.D.

Mr J. C. Oman says: “Defaced by time and the hand of man, transformed a good deal through well-meant restorations, the celebrated temple at Buddh Gaya, even in its modern disguised condition, with its 19th-century stucco about it, and its brand new gilt finial, is an imposing structure, about 180 ft. high and 50 ft. wide at its base. All things considered, it has certainly lasted remarkably well, the material of which it is constructed being only well-burnt brick cemented with mud. Stone has been used only in the door frames and flooring. The building is plastered with lime mortar. It is built in the form of a pyramid of nine storeys, embellished on the outer side with niches and mouldings. Facing the rising sun is the entrance doorway, and

¹ Fergusson's *Indian and Eastern Architecture*, i, 104.

above it, at an elevation greater than the roof of the porch which once adorned the temple, there is a triangular opening to admit the morning glory to fall upon the image in the sanctuary."

A Burmese inscription records a restoration in 1306-1309. In 1877 permission was granted these Buddhists to restore the temple again, but Raja Rajendralala Mitra, deputed by the Local Government to inspect their work, stated that "the Burmese carried on demolitions and excavations which in a manner swept away most of the old landmarks." The remains of the vaulted gateway in front of the temple were completely demolished, and the place cleared out and levelled. The stone pavilion over the Buddha Pad was dismantled, and its materials cast aside on a rubbish mound at a distance. The granite plinth beside it was removed. The drain-pipe and gargoyle which marked the level of the granite pavement were destroyed. The foundations of the old buildings noticed by Hiuen Tsang were excavated for bricks and filled with rubbish. The revetment wall round the sacred tree had been rebuilt on a different foundation on the W. The plaster ornaments on the interior facing of the sanctuary were knocked off, and the facing was covered with plain stucco, and an area of 213 ft. to 250 ft. was levelled and surrounded by a new wall. For further description of the temple reference may be made to Rajendralala Mitra's *Buddh Gaya*, Calcutta, 1878; and Cunningham's *Arch. Surv.*, vol. iii.; and Sir Edwin Arnold's delightful chapter in *India Revisited*, 1886, "The Land of the Light of Asia."

To the N.W. is a small but very ancient temple, in which is a figure of Buddha standing. The doorway is finely carved.

Buddhists are allowed to remain permanently at Buddh Gaya,

where there are Buddhist monks, and a remarkably beautiful image of Buddha, brought from Japan, is located in the Burmese monastery.

From Gaya the S. Bihar Railway runs E. to Lakhisarai (80 m.). The Grand Chord line, as above noted, runs S.E. to Asansol and W. to Dehri (D.B.), where the river Son is spanned by a vast girder bridge with 93 spans of 100 ft. each, the total length being 10,052 ft. Above the bridge the Grand Trunk Road crosses the river over a stone causeway, and higher up are the headworks of the Son Canals, consisting of a reservoir dam $2\frac{1}{2}$ m. in length, with the main canals branching off on either side. A light railway runs from Dehri up the river to Rohtas station, 24 m., overlooking which is the ancient hill-fort of Rohtas (D.B.), occupying a plateau 4 m. by 5 m. and 1500 ft. in height. The fort was impregnable, being surrounded for the greater part by sheer precipices 500 ft. to 1000 ft. in height, with the few comparatively vulnerable points protected by strong defensive works consisting of double and triple lines of ramparts and bastions. Its natural facilities admirably fitted it for a siege, the summit being wooded and capable of extensive cultivation, with a plentiful supply of water at all seasons, and excellent grazing for some thousands of cattle. There are a magnificent Mughal Palace in an excellent state of preservation and two villages in the plateau. From Dehri the Grand Chord line runs W. to Sasaram¹ (D.B., population 23,097), a distance of 11 m., where is the colossal domed mausoleum of the Afghan usurper Emperor of

¹ Sasaram=1000 toys. A certain Asura, or demon, is said to have lived here, who had 1000 arms, each holding a separate plaything.

Delhi, Sher Shah (1540-1545), one of the most magnificent in all India (see Fergusson's *Indian Architecture*, 2, 218); it rises from a terrace in the midst of a tank 1000 ft. square. The height from the floor to the apex of the dome is 101 ft., the total height above the water being over 150 ft.; the dome has a span of 72 ft. In the town is the slightly smaller mausoleum of his father Hasan Shah Suri, standing in an enclosed courtyard, and about a mile to the N.W. is the tomb of his son, Salim Shah, which was intended to be larger than his father's, but was never completed; it also stands in a tank. These buildings should be seen by all interested in Oriental architecture. In a small cave just below the summit of a hill rising above the town is an Asoka inscription dating back to 232 B.C. The railway then runs W. to Kudra (D.B.), 16 m. from Sasaram; the same distance to the S. is the hill-fort of Shergarh, on a small plateau about 800 ft. in height. It was fortified by Sher Shah, and a palace, still in a fair state of preservation, built on the summit. Eight miles farther into the hills are the caves of Gupteswar, several hundred feet in length, and a noted place of worship. From Kudra the distance is 14 m. by the railway, to Bhabua Road (D.B.); from there it is 10 m. to Bhabua (D.B.) in the S. Five miles to the S.W. of Bhabua is the ancient Hindu temple of Mundeswari, on the summit of a hill 600 ft. in height; an inscription dates it to 635 A.D. Eight miles S. of Bhabua are immense earthwork fortifications. They enclosed in a valley an ancient town, the only remains of which are broken bricks covering an area of about 2 sq. m.; the foundations of the houses are still below the soil. There is an Asoka inscription close by; another is at Jainpur, a couple of miles to the N.E. Six miles to the W. of Bhabua is

Chainpur, once an extensive town, now no more than a large village. A short distance to the W. is the mausoleum of Bakhtiyar Khan, a noble of the time of Sher Shah; it is a splendid domed structure similar to those in Sasaram, standing in an enclosed courtyard. There is a fort at Chainpur built by Raja Salivahan, whose descendants reside now at Bhagwanpur, 6 m. S. of Bhabua. The fort is now a famous place of pilgrimage, owing to a Brahman priest having done "dharna," or fasted there till he died. Scattered over all this part of the country are the remains of old forts, attributed to the Suris, an aboriginal people. They consist of high mounds of earth, on which used to be situated the house of the local chief, the whole being surrounded by a deep moat. Fifteen miles N.W. of Bhabua Road station is Baidyanath, containing a large number of buildings dating back to early and mediæval Brahmanism. It is supposed to have been the centre of the Suri kingdom, and is perhaps one of the most interesting sites in India, being surrounded by numerous structural relics illustrating the earliest Brahmanical architecture of which we have knowledge.

Excursion to PARASNATH.

Parasnath Mountain.¹ — By motor to Dumri on the Grand Trunk Road, or by rail to Isri station, 198 m. from Calcutta, on the E.I.R. Chord. Isri is 2 m. from Dumri, where there is a D.B., with two servants. The distance from Isri to Madhuban, at the foot of the mountain Parasnath, is 13 m. N.E. by good motor road. The D.B. at summit has

¹ See Chap. vi. of Mr Bradley Birt's *Chota Nagpur*.

no provisions or servants, and permission to occupy must be obtained in advance from the Deputy-Commissioner, Hazaribagh. The ascent from Madhuban occupies 2½ hours, and can be made on foot, or by chair and bearers. The mountain can be reached equally well from the Nimiaghat station (193 m. from Calcutta). There is a D.B. on the Grand Trunk Road, close to the foot of the mountain, 1 m. from that station and about 3 m. from Isri. Information should be given beforehand to the Sub-Inspector of Dumri Thana, for coolies and supplies. The lover of mountain scenery will enjoy a visit to this far-famed mountain and place of pilgrimage. It is 4488 ft. above sea-level, and is the Eastern metropolis of Jain worship. According to tradition, Parasnath, who was the 23rd Tirthankar of the Jains, was born at Benares, lived 100 years, and was buried on this mountain. The numerous temples, though most picturesque, are of no great antiquity.

At Madhuban, 1230 ft., are the local headquarters of the Digambara and Svetambara sects of Jains. The principal representatives of the Jains met with in Bengal are the Marwaris, whose home of origin is in Rajputana. "The appearance of the snow-white domes and bannerets of its temple, through the fine trees by which it is surrounded, is very beautiful." The ascent of the mountain is up a pathway worn by the feet of innumerable pilgrims from all parts of India. Ten thousand still visit the place annually. The path leads through woods with large clumps of bamboo over slaty rocks or gneiss, much inclined and sloping away from the mountain. The view from a ridge 500 ft. above the village is superb. Ascending higher, the path traverses a thick forest of *sal* (*Shorea robusta*), and other trees

spanned with cables of *bauhinia* stems. At 3000 ft. the vegetation becomes more luxuriant, and the conical hills of the white ants disappear. At 3500 ft. the vegetation again changes, the trees becoming gnarled and scattered. The traveller emerges from the forest at the foot of a great ridge of rocky peaks, stretching E. and W. for 3 or 4 m. The saddle of the crest (4230 ft.) is marked by a small temple, one of many which occupy various prominences of the ridge, with a beautiful view. To the N. are ranges of low wooded hills, and the Barakar and Adjai Rivers. To the S. is a flatter country, with lower ranges and the Damodar River. The twenty-four Jain temples built commemorate the attainment of Nirvana (the cessation of individual existence) by twenty of the twenty-four deified saints recognised by the Jains. The situation of the principal temple is very fine, below the saddle in a hollow facing the S., surrounded by groves of plantain and *Ficus Indica*. It contains little but the sculptured feet of Parasnath and some marble cross-legged figures of Buddha, with crisp hair, and the Brahmanical cord. Many chapels and altars with such reliefs are dotted about the crest. A convalescent dépôt for European soldiers was established in 1858, but was abandoned; the officers' quarters are now utilised as a D.B.

138 m. from Calcutta is Sitarampur junction station for Barakar, 5 m., and Katrasgarh, 40 m.

132 m. from Calcutta is Asansol junction station (R.) of the Bengal and Nagpur Railway (see Route 7). (D.B., population 21,919.)

121 m. from Calcutta is Raniganj station (population 15,497). Inspection Bungalow on the E. edge

of the great coal-fields of Bengal, which stretch out 384 m. to the W., and extend under the bed of the Damodar. The place was formerly the property of the Raja of Burdwan, hence the name. More than thirty species of fossil plants, chiefly ferns, have been found in the coal, of similar species to those in the Yorkshire and Australian coal. The mines afford regular employment to a large number of men and women.

The following information regarding the coal-fields of Bengal will be of interest. That coal existed here was known as early as 1800; "The coal of Bengal is all derived from the rocks of the Gondwana system, and is of the Permian age, or rather younger than the coal of England. The area of the Raniganj field is not less than 500 sq. m., exclusive of its extension under the Ganges Alluvium. The next most important field at the present day is Karharbari, about 11 sq. m. in area, the greater part of which is owned by the E.I. Railway Company. This coal-field yields the best coal in Bengal. A third field" (now the most important of all) "is the Jherria coal-field, about 200 sq. m. in area. It is situated 16 m. to the W. of the Raniganj field. The fourth field is Daltonganj, with an area of about 200 sq. m." The progress of the Bengal coal industry can be judged from the following figures of the output:—1881, 900,000 tons; 1891, 1,747,000 tons; 1907, 8,500,000 tons; 1909, 11,500,000 tons; in 1911, of the Raniganj coal-field, 4,311,956 tons; of the Jherria coal-field, 6,373,728 tons; including the Giridih, Daltonganj, and other small fields, the total out-turn of Bengal and Bihar amounted to 11,468,904 tons. The total output from the mines of British India regulated by the Indian Mines Act, was, in 1911, 12,048,726 tons. Numbers employed, 106,598 in 1911. Ex-

ports of coal from India were 889,601 tons in 1910-11 and 873,987 tons in 1911-12; in this last year 935,338 tons of bunker coal left Calcutta for use of steamers. The figures have been greatly affected by the War: thus the total exports of coal from Calcutta fell from 3,017,180 tons in 1913-14 to 1,610,645 tons in 1915-16. At Raniganj there are also Burn & Co.'s Potteries and the Bengal Paper Mills.

75 m. from Calcutta is Khana junction station for the loop line (see p. 49).

67 m. from Calcutta is **Burdwan** station (R.), D.B. (population 35,921), headquarters of a District, and the residence of the Maharaja of Burdwan, the descendant of a Panjab Khatri, who settled at Burdwan soon after the place had been conquered by Prince Khurram, later the Emperor Shah Jahan, in 1624. The Maharaja possesses a fine Palace in the place.

38 m. from Calcutta, **Pandua**, now only a small village, formerly the seat of a Hindu Raja and fortified by a wall and trench, 5 m. in circumference, of which traces are still to be seen. A tower, visible from the railway station, standing 120 ft. high, obviously built in imitation of the Kutb Minar at Delhi, is said to commemorate a victory of the Muhammadans over the Hindus in 1340: repaired in 1906-07 by Government, after an ancient lithograph.

On the Hooghly-Katwa Railway (distances given from Bandel, 25 m. from Calcutta, the junction), is

26½ m. **Kalna** (population 8,603). A residence of the Maharaja of Burdwan, and formerly the port of Burdwan, on the River Bhagirathi or Hooghly. Inspection Bungalows,

65½ m. Katwa (population 6904). At the junction of the Bhagirathi and Adjai Rivers. Inspection Bungalow.

24 m. from Calcutta is Hooghly, junction station for the Eastern Bengal Railway.

21 m. from Calcutta are Chander-nagore, and 12 m. from Calcutta, Serampore, stations. 1349 m. from Bombay is Howrah, Calcutta terminus. (See Route 5.)

ROUTE 3.

CAVES OF AJANTA.

Jalgaon, 261 m. from Bombay and 15 m. from Bhusawal, by the G.I.P. Railway, is the nearest and most direct route from Bombay to the Ajanta Caves. Jalgaon is 35 m. from Fardapur, and the Caves are about 4 m. S.W. of Fardapur (where there is a Travelers' Bungalow, ordinarily furnished).

No transport other than country tongas (cost about Rs.35) is available from Jalgaon, and even to secure this arrangements must be made beforehand with the Mamlatdar of Jalgaon (a journey by country-cart will occupy eight to ten hours). Provisions, bedding, cook, and other servants must be taken. The road is fair and fit for motor cars as far as Fardapur. There are two District Bungalows on the road at Neri and Pahur, to occupy which the permission of the Collector of East Khandesh (at Jalgaon) must be obtained beforehand; they are situated at convenient stages, with plain ordinary furniture, with no servants or other conveniences of any sort.

The best and easiest way is to send up a motor car by railway to Jalgaon station, and use it for the expedition. By these means the trip can be made in a day during the fair season. Other ordinary country transport necessitates spending a night or more on the journey. The expedition is a very fine one, but quite out of the range of the ordinary tourist.

The Caves of Ajanta,¹ like those of Kanheri, but unlike the majority of Buddhist caves, are excavated in the scarped side of a deep ravine, at the head of which is a steep waterfall. They lie about 4 m. from the Fardapur rest-house, and the Warora stream and its affluent from the ravine have to be crossed several times in order to reach them; the crossing is generally a simple matter, but after heavy rain the channels may become impassable torrents for some hours or longer. The ravine is well wooded and pretty, and the view of the curved front of the caves, from the inner entrance to it, is extremely picturesque. These temples and monasteries date from shortly after the reign of Asoka, 272-231 B.C., to before the expulsion of Buddhism from India, *i.e.*, about 600 A.D. They were visited by Hiuen Tsang about 640 A.D. The caves, which are famous among all such remains for the paintings with which they were once decorated, are twenty-nine in number. Of these, four (Nos. 9, 10, 19, and 26) are Chaitya chapels, and the rest are vihara halls or monasteries. Six of them belong to the older Hinayana sect, and the rest to the Mahayanas. The oldest and the lowest in position are Nos. 9 and 8, which date from the 2nd century B.C., while the latest are referred to the 7th century A.D. No. 8, the first on the left at the end of the path to the caves, is a small vihara,

¹ For the Ajanta Caves, etc., see both volumes of Fergusson's *Indian Architecture*.

measuring 32 ft. by 17 ft. by 10 ft. It had two cells at each side and two at the sides of the antechamber of the shrine. It is of the same age as the Chaitya Cave, No. 9, which is one of the oldest of all the Buddhist caves of India, and is 45 ft. deep, 22½ ft. wide, and 23 ft. high. In dimensions and in the decoration of its façade it much resembles the Nasik Chaitya Cave (p. 34), but is rather older in date than that. Fourteen plain octagonal pillars on each side separate the nave and aisles, and eleven more continue the colonnade round the dagoba at the end of the cave. The vaulted roof once carried wooden ribs; in front of it is the great horseshoe window, 11½ ft. high, with a terrace and rail in front of it, and a second terrace over the porch, with a guardian *āvarapala* at either end. The dagoba is 11 ft. high to the top of its capital; this is in the form of a relic-box, and probably once bore a wooden umbrella. Remains of paintings are still visible on the left and back walls; on each pillar were once painted representations of Buddha, and on the roof of the aisles was painted a pattern of wooden compartments.

No. 10 is a still larger Chaitya, measuring 95 ft. by 41 ft. by 36 ft.; and was also once fitted with wooden ribs, the roofs of the aisles having ribs carved in the stone. Its façade has fallen. The dagoba resembles that in No. 9, and, as in that cave, there are considerable remains of the paintings which once covered the walls. The costumes depicted in these resemble those of Sanchi (p. 137).

No. 11 appears to have been remodelled. The roof of the veranda is painted with birds and flowers. The hall measures 37 ft. by 28 ft. by 10 ft., and is carried by four primitive columns. There is a bench along the right side.

There are three cells on the left side, and two cells and a shrine in the end wall; in the shrine is a free-cut statue of seated Buddha, with a fine kneeling figure in front of it.

No. 12 is a vihara measuring 36 ft. square, with four cells on each of the three inner sides, and is probably of the same age as No. 9. The cells have two couches with stone pillars. Over their doors are representations of Buddhist windows.

No. 13 is a small hall, 16½ ft. by 13½ ft. by 7 ft., with seven cells, each with a stone couch, round it. This completes the group of the older caves; and with Nos. 7 and 6 begins the group of excavations of the Mahayana school. The former (7) is a vihara of unusual shape, in that it has no hall, the veranda, which is preceded by two porches borne by columns of the Elephanta type, leading directly to four cells and to the antechamber to the shrine; both the last are profusely decorated with sculpture. The statue represents Buddha, with his legs crossed under him, and his right hand raised to bless.

No. 6 is the only cave here with two storeys. The lower stage, of which the front has fallen, measures roughly 54 ft. square. It is borne by sixteen plain octagonal columns in four rows, but only seven of these now stand. They are connected above by beams carved on the ceiling. On each side and at the back are cells, and in the middle of the last an antechamber with Elephanta-like columns leads to the shrine containing a seated figure of Buddha. The stair from this storey leads to the veranda of the upper storey, once carried by four columns, with chapels outside it and rooms at the end of it. The hall measures rather less than that of the lower storey, and is carried

by twelve columns arranged round a central space. There are cells all round this hall also, and a shrine with a front chamber in the back wall.

Nos. 5 to 1 form with Nos. 21 to 29 the latest group at Ajanta, and belong to the 6th and 7th centuries A.D. No. 5 has been commenced only, but has a handsome door at the back of the veranda. No. 4 is the largest of all the viharas, measuring 89 ft. square, and supported by twenty-eight pillars. It is surrounded by cells as usual, and has a large shrine, approached by an antechamber at the back. The veranda was carried by eight octagonal columns, and has three doors and two windows in the back wall leading to the hall, the centre one being decorated with elaborate carvings. Between it and the right window is a sculptured relief of the Buddhist Litany, in which two figures are represented in each compartment as fleeing to Buddha from danger, from fire, snakes, and wild beasts. No. 3 is a small vihara, of which again only the veranda is shaped out. No. 2 is a vihara hall, 48 ft. square, supported by twelve pillars, with five cells on either side and one chapel room at each side of the antechamber and shrine. There are also two chapel rooms at each end of the veranda, the front of which is carried by four pillars with flower-shaped capitals; the roof of the veranda projects 7 ft. to the front of the columns. Between the hall and the veranda are a finely-decorated door and two windows opposite to the side aisles formed by the columns in the hall, which are richly carved. At the end of these aisles are two chapel rooms, that on the E. side with the figures of a king and a queen holding a child, with small figures of sporting children below them; and that on the W. side with two large male figures. A

richly-carved doorway leads to the shrine; in front of the seated figure in it are kneeling worshippers. Traces of painting exist in this cave on the roofs of the veranda and the hall and its aisles, and in the shrine and the two side chapels. The scenes on the E. wall of the hall represent a royal procession with elephants, horses, and armed retainers, and a sailing-boat laden with jars.

No. 1 is one of the largest and most splendidly-decorated viharas of all. In the front is a veranda borne by six columns, once preceded by a porch borne by two. Outside the veranda are three excavations on each wing, and inside is one at each end. The hall measures nearly 64 ft. square, is borne by twenty columns enclosing a central space, and has five cells on either side. At the back an ante-chapel with two columns, flanked by two cells on either side, leads to a large shrine. All along the front of the cave is a sculptured architrave with spirited representations of elephants, hunting scenes, and groups of figures. On the West chapel are representations of the four scenes of sickness, old age, and death, which led Buddha to renounce the world. In the upper part of the frieze are geese under a band of lions' heads. Three doors and two windows open into the hall from the veranda, the centre door being elaborately carved, as are the columns of the back row in the hall and the sides of the other rows which face inwards. These carvings deserve detailed notice, being among the richest and most ornate known. In the shrine is a colossal statue of Buddha, supported on either hand by Indra. At the sides of the elaborately decorated doorway to it are statues of the goddesses of the Ganges and Jumna above, and of two snake-hooded guardians at the bottom. The whole of the cave was once covered with paint-

ings, of which a certain amount remains. In the four corners of the ceiling are interesting panels which represent groups of foreigners—perhaps Persians. On the front wall is represented the reception of a Persian embassy by a Raja in his palace. On the back wall to the E. of the antechamber is a mountain scene, and between the doors of the two cells are a Naga Raja and his wife in conversation with another personage, while high up on the wall is a snake-charming scene; farther on is another scene of a Naga Raja and ladies; and between the second and third cell doors, on the E. wall, is a scene of elephants and soldiers. On the back wall of the antechamber to the shrine is a painting of the Temptation of Buddha by Mara, such as is represented in the bas-relief in cave No. 26.

Returning to the centre of the path, cave No. 14 is reached above No. 13, and forms the third of the middle group of Mahayana works. According to Mr Burgess, Nos. 16 and 17 are the finest of the whole series of caves, and with the Chaitya cave, No. 19, date from about 500 A.D. The first of these, a vihara, is incomplete. The second, No. 15, has a hall 34 ft. square without columns, preceded by a veranda, and with six cells on each side; in the back wall are two cells and a shrine. No. 16 has a veranda 65 ft. long and nearly 11 ft. wide, borne by six plain octagonal pillars; from the front of it steps descend to a chamber with a representation of a Naga Raja. Here also three doors and two windows open from the veranda into the hall, which is nearly 66 ft. square, and has twenty octagonal pillars, the roof of the front aisle being carved to simulate beams. On each side are six cells. The shrine, which is entered direct from the hall, and has side aisles separated off by two columns, contains in the centre a huge statue of Buddha in

the teaching attitude. On the left wall of the hall are paintings of a death scene, and of Buddha with a beggar's bowl, and teaching in a vihara. On the right wall, left of the door of the first cell, are the remains of a representation of Prince Siddhartha drawing the bow. No. 17 is very similar in size and arrangement to No. 16, but has an antechamber to the shrine, and two cells on either side of the former. Over the central door to the hall are a row of painted Buddhas. There are only one side door and three windows. Between the veranda and No. 16 is a fine cistern. In front of the figure of Buddha in the shrine stand two figures, one with a mendicant's bowl. On the ceiling of the N. end of the veranda is a much-damaged circular painting, in the compartments of which human beings and animals are represented; and on the back wall of the E. half is a painting of three females and a male figure flying through the air. The paintings on the side walls of the hall have been ruined by smoke. On the W. portion of the back wall is a picture with scenes in a court of justice, and hunting, and others in which a lion plays the principal part. On the right wall is a scene of the landing of Vijaya in Ceylon, and of female demons devouring victims. No. 18 is merely a porch. No. 19 is the third Chaitya cave, measuring 46 ft. by 24 ft. by 24 ft. high. It is therefore of very similar dimensions to No. 9, but, unlike that, is profusely decorated throughout. In front of it was a large court, most of which has fallen; but the porch at the back of the court under the great arched window still stands, and, like the whole façade, is covered with elaborate ornament. Five pillars on each side of the nave separate the aisles from it, and five more run round the dagoba. Outside the first two pillars of each colonnade is

another, thus completing an aisle passage all round the cave. The columns have square bases and rounded shafts with bands of carving and bracket capitals richly decorated. Above the columns on the wall under the curved roof were painted compartments of figures of Buddha, divided by floral arabesques. The roof has stone ribs carved under it. The front of the dagoba bears a figure of Buddha. Outside the cave to the W. is a relief of a Naga Raja, with a seven-headed cobra hood, and his wife. No. 20 has a veranda, of which the roof is carved in imitation of rafters, and a hall 28 ft. by 25 ft.; the ante-chamber here projects into the hall.

The rest of the caves, from 21 to 29, complete the group of the later Mahayana caves, and lie considerably farther W. The veranda of 21, which has fallen, had at each end of it a chapel chamber with two pillars in front, with the earliest representation, as Mr Burgess believes, of the leaf falling over the corners of the capitals. The jewel or necklace pattern on the frieze above is characteristic of the work of the 7th century. The hall measures 51 ft. square, and has twelve columns; the image in the shrine is attended by huge *chauri* bearers. No. 22 is a small vihara of 16 ft. square; the image in the sanctuary is represented with its feet resting on a lotus. No. 23 is another vihara hall about 50 ft. square, with twelve pillars; the sanctuary is incomplete, but all four columns of the veranda are entire. No. 24 would have been the largest vihara of all, but was never completed. It shows how these caves were excavated by means of long galleries, which were broken into one another; the carving which exists is very elaborate. No. 25 is a small vihara hall 26 ft. by 25 ft.; the veranda, which has two pillars, opened on a court in front. No.

26 is the fourth Chaitya cave, and is very similar to No. 29. It is 68 ft. deep, 36 ft. wide, and 31 ft. high. The veranda, borne by four columns, here also opened on to a court with sculptures on the sides of it, one on the east side representing the Buddhist Litany again. Over the veranda was a broad balcony in front of the great window, 9 ft. high; on each side of this are various sculptured reliefs of Buddha. A colonnade of twenty-six pillars forms the aisles, and runs round the dagoba at the back of the cave. The frieze above the colonnade is richly sculptured, and the roof is decorated with stone ribs. The walls of the aisles are also profusely decorated with sculpture; on the left wall, near the door from the veranda, is a colossal image of the dead Buddha, and farther down the wall is the relief of the temptation of Buddha by Mara. The dagoba has representations of Buddha all round it, and is over 20 ft. high. No. 27 is an unfinished vihara, which would have been 43 ft. wide and 31 ft. deep. No. 28, difficult of access, would have been a fifth Chaitya, of which only part of the great window has been excavated. No. 29 is inaccessible; only part of the veranda of it was ever completed.

ROUTE 4.

BENARES.

Benares* D.B. (p. 46), (lat. 25° 18', long. 83° 3'), 940 m. from Bombay, 429 m. from Calcutta.

¹ In his essay on Warren Hastings Macaulay wrote thus: "His first design was on Benares, a city which in wealth, population, dignity, and sanctity, was among the foremost of Asia. It was commonly believed that half a million of human beings was crowded into that laby-

78 m. from Allahabad, 36 m. from Jaunpur, 45 m. from Ghazipur, originally Vārānasi, and commonly called Kāsi to which the suffix Ji is added by the Hindus by way of respect (population, 203,804 — Hindus, 151,000; Brahmans, 30,000), has been the religious capital of India from beyond historical times. It is mentioned in both the *Mahabharata* and *Ramayana*, and was officially known in the 18th century as Muhammadabad (but the name did not endure). The most generally accepted derivation of the name *Vārānasi* is from the streams Vārāna (*modern Barna*) and Asi, the former a river of some size on the N. and W. of the city, the latter a rivulet, now a mere *nulla*, embraced within its area. The present city lies wholly between the Barna and the Asi, and thus gives an air (perhaps spurious) of probability to the above derivation. In old days the Asi was well away from the city, which has grown in that direction in modern times. "Benares is said to combine the virtues of all other places of pilgrimage, so much so that

rinth of lofty alleys, rich with shrines, and minarets, and balconies, and carved oriels, to which the sacred apes clung by hundreds. The traveller could scarcely make his way through the press of holy mendicants and not less holy bulls. The broad and stately flights of steps which descended from these swarming haunts to the bathing-places along the Ganges were worn every day by the footsteps of an innumerable multitude of worshippers. The schools and temples drew crowds of pious Hindoos from every province where the Brahminical faith was known. Hundreds of devotees came hither every month to die, for it was believed that a peculiarly happy fate awaited the man who should pass from the sacred city into the sacred river: Nor was superstition the only motive which allured strangers to that great metropolis. Commerce had as many pilgrims as religion. All along the shores of the venerable stream lay great fleets of vessels laden with rich merchandise. From the looms of Benares went forth the most delicate silks that adorned the halls of St James's and of Versailles; and in the bazaars, the muslins of Bengal and the sabres of Oude were mingled with the jewels of Golconda and the shawls of Cashmere."

any one of whatever creed, and however great his misdeeds, dying within the compass of the Panch Kosi road which surrounds Benares, is transported straight to heaven. This belief leads many people to end their days at Benares. Its peculiar sanctity is derived from the 'ten-horse sacrifice,' referred to under Dasaswamedh Ghat, (p. 66.) (Motor Guide, U.P.)

The site of Benares has often been changed. The past history of this, one of the most ancient cities in India, is involved in obscurity. The Chinese travellers Fa-Hian and Hsien Tsang visited it in 399 A.D. or 629-645 A.D. respectively. The latter mentions about 100 temples sacred to Siva, with 10,000 votaries. In past ages it has been a city of sanctity and learning, the home of philosophers and grammarians. It is, however, certain that it was a most flourishing and important place six centuries before the Christian era, for Sakyamuni (Buddha) who was born about 558 B.C. and died in 483 B.C., came to it from Gaya to establish his religion, which he would not have done had it not been then a great centre. Many important writers of the Hindus are first heard of at Benares. Of intermediate events little is known, but the place was sacked by Mahmud of Ghazni. We learn from Husain Nizami's history that in 1194 A.D. Jaichand, Raja of Benares, "whose army was countless as the sand," was defeated and killed by Kutb-ud-din, the general of Shahab-ud-din Ghorî, and the Emperor Ala-ud-din destroyed 1000 temples, and built mosques on their sites. From that date Benares was governed by the Moslems, and became part of the province of Allahabad. It is due to the iconoclastic spirit of the conquerors that hardly a single building can be found in Benares which dates beyond the time of

Akbar (1556-1605 A.D.), and there are but few which in their present form date beyond the time of the Mahratta supremacy in the latter half of the 18th century.

Benares was ceded to the British in 1775. For several years previous to 1780 Chait Singh, the Maharaja of Benares, had been called upon to provide special financial aid, but had made excuses. Warren Hastings in 1780 called on the Maharaja to furnish a cavalry contingent. When the Maharaja evaded compliance, Hastings imposed a fine of 50 lakhs, and in August 1781 proceeded in person to enforce it. The small body of British troops was overcome, and Hastings fled to Chunar. He returned with reinforcements and deposed Chait Singh, who retired to Gwalior. The E.I. Co. assumed the administration. The detailed history of the insurrection is the most interesting subject in Benares annals of modern times. W. Hastings' own narrative gives all the details: the Appendices furnish reports and journals of his officers.

In May 1857 the garrison of Benares consisted of the 37th N.I., known to be disaffected, and the Ludhiana Sikh regiment. Upon the arrival of Colonel Neill from Calcutta an attempt was made on 4th June to disarm the regiments on parade, but this miscarried, and in the end it became necessary to turn the guns on the Sikhs, who were driven off by the fire of the battery of Captain William Olpherts, subsequently so distinguished in the first relief of Lucknow. This mutiny incident—the disarming of the troops—has been the subject of much controversy.

Benares is still *par excellence* the Holy City of the Hindus, and the great northern centre of the worship of Siva, and the annual number of pilgrims who visit it is not less than 1,000,000, while the number of Brahmans residing in

the place is over 30,000. Every pilgrim, besides visiting the various holy spots in the city, must make the circuit of the Panch Kosi road, unmetalled, outside the city, round the sacred territory of Benares, commencing at the Manikarnika Ghat, proceeding by the Asi Ghat, and returning by the Barna Ghat (see p. 68). The route, which is 36½ m. in length, and the pilgrimage of which occupies six days, is picturesquely lined by fine trees and small shrines. The end of each stage is marked by a picturesque village, with numbers of temples and small *dharmsalas*.

The ornamental **Brasswork** which is met with all over the world is a *specialité* of Benares; but the modern work is far less carefully executed than the old, which is now difficult to procure. Small idols and other images in brass and other materials are made in great quantities in the narrow lanes around the Golden Temple. **Shawls, silks, and embroideries** may also be purchased here. The weaving of brocades (Kimkhwabs, or Kincobs) is an old Benares speciality: its origin cannot be traced. Silk being considered pure by Hindus for ceremonial purposes, silk cloth would naturally be manufactured to meet the demands of wealthy pilgrims. Mughal Emperors, especially Akbar, encouraged the industry, sending brocades as presents to European monarchs. Later, the industry declined, but has been revived. Indian taste allows the use of silk brocades for all kinds of wearing apparel, upholstery and furniture. In brocade work *Kalabatun* (gold thread) is as essential as silk in the weaving. The loom employed is somewhat elaborate, and closely approaches the application of machinery: the weaving is complex because very elaborate patterns are often produced. The workmen display considerable

skill in the arrangement of forms and colours, producing beautiful and harmonious combinations, with the subdued elegance characteristic of Indian decorative art. The firm of Girdhar Das Hari Das have gained numerous medals for their brocades, scarves, and "kincob" dresses.

As the finest view of Benares is obtained from the river Ganges, the banks of which are bordered by Ghats, or flights of stone steps, descending to the water from the most famous buildings in the city, the traveller will do well to spend most of his time in a boat, passing along the whole river frontage, where, in the morning especially, he will see crowds of the people coming down to bathe and drink the water of the sacred river. The Hon. Babu Motichand, C.I.E., Rais of Azmatgarh, on receiving previous intimation, places a pleasure-boat called *The Pearl* at the gratuitous disposal of visitors who wish to view the Ghats from the river. Other boats can be hired.

For those who are pressed for time, it will be sufficient to see the Monkey Temple, the Observatory, and the Ghats as far as the Panchganga Ghat, disembarking there to see the Golden Temple. This involves an interesting walk of $\frac{3}{4}$ m. through narrow picturesque streets. The earlier handbooks to Benares by the Rev. Mr Sherring and the Rev. Mr Parker were useful little publications, but are out of print and not up to date. The best guide-book now is *Kashi, or Benares*, by the Rev. E. Greaves (Indian Press, Allahabad), obtainable at hotels and railway bookstalls. Mr E. B. Havell's *Benares, the Sacred City*, is well edited and illustrated. Americans and others may be reminded of the amusing chapters 53-56, about Benares in Mark Twain's *More Tramps Abroad*.

The river and native town are nearly 3 m. from the

Cantonment, N. of the railway

line, where a detachment of Europeans and a native regiment are stationed. Near the *Hotels* is *St. Mary's Church*, with some old tombs mostly removed from the old city cemetery. To the N. of these are the Civil Station, and to the E. the Nandeswar Kothi, the Government College, and the garden of Madhu Das. The *Queen's College* is a building in the perpendicular style. The interesting Buddhist and Hindu remains, once here, have been transferred to Sarnath. To the N. of it, *i.e.*, in the College grounds, on the N. side of the College, is an ancient monolith, $31\frac{1}{2}$ ft. high, found near Ghazipur. On the obelisk there is a Gupta inscription and an English record of its removal. In the garden of Madhu Das Warren Hastings was encamped when he attempted to arrest Maharaja Chait Singh, of Benares (see p. 62), on 16th August 1781, and it was from here that, five days later, he was obliged to retreat by night to Chunar after the repulse of the first detachment of retiring troops at Ramnagar. They assaulted the town in direct disobedience of Hastings' orders.

The *Nandeswar Kothi*, now belonging to the Maharaja of Benares, where he entertains distinguished visitors — King George V. as Prince of Wales stayed here in 1906, with the Princess, now Queen Mary—was the house in which Mr Davis, Judge and Magistrate of Benares, was attacked by the followers of Wazir 'Ali, the deposed Nawab of Oudh, who had just killed Mr Cherry, the British Resident, in the building now occupied by the Collector's Court, on the 14th of January 1799. Mr Davis sent his wife and two children on to the roof, and, with a spear, placed himself at the top of the staircase leading to it, where he successfully defended himself until he was rescued by the arrival of a regi-

ment of cavalry from a small Cantonment 12 m. away. Lord Curzon had an historical tablet affixed to the wall of the house. In the Civil Station is a house in which Warren Hastings once lived temporarily; a sundial constructed by him still exists just outside the garden on the edge of the road.

From near the Kothi a fine road—the Grand Trunk Road from Calcutta to N. India—leads to the Raj Ghat and Ganj-i-shahid Mosque, passing the Bakariya Kund and near the Bhairon Lat. The first of these, on the right side of the road, was a famous, and still is a picturesque, tank teeming with Muhammadan monuments and mosques converted from other Hindu buildings, and built of pre-Muhammadan materials; close to it is a shrine, known as the Battis Khamba, or Thirty-two Pillars, now a Muhammadan tomb. The whole neighbourhood of the Bakariya Kund is now dirty and neglected, and only of interest to the antiquarian. The Lat of Bhairon, on the left side of the road farther on, is a Buddhist relic, and may possibly be one of the Lats erected by King Asoka. The Ganj-i-shahid, not easy to find, behind some broken-down steps, on the S. side of the open space in front of the Raj Ghat Railway Station, is an interesting mosque built of fine Hindu remains, erected as a memorial of the Mussulmans who fell in the early captures of Benares.

The London Mission is close to the Cantonment Railway Station on the S. side of the line; the Wesleyan Mission is in Cantonments; the Zenana Bible and Medical Mission is near the Queen's College, while the Hospital of the former and the Church Mission are at Sighra, 1 m. S. of the Cantonment Railway Station. Farther on is the **Vizianagram Palace**, built by the Maharaja who died at Benares in 1845 (see

p. 456). The house can be visited by permission of the Agent. There is a good view from the terraced roof over the Ganges in the direction of Aurangzeb's mosque and the Golden Temple. Close to the palace on the W. are several Jain temples. This is the reputed birthplace of Paras-nath, the famous Jain Saint.

The Central Hindu College and School, in the Kamachcha quarter, started under the auspices of Mrs Annie Besant, has for its object the combination of religious and moral education with mental and athletic development for Hindu youths. The College was visited by King George V., then Prince of Wales, on 19th February 1906. The College is to be merged in the new Benares Hindu University (foundation-stone laid by Lord Hardinge in February 1916). The site of the University comprises 2 sq. m. S. of the city: the building has commenced. The present College is 2 m. from the University site, and will probably become entirely a school as distinct from a college: it is now both.

NATIVE TOWN.

The **Durga Temple**, sometimes called the Monkey Temple by Europeans from the numbers of monkeys which inhabit the large trees near it, is about three-fifths of a mile S. of the Vizianagram Palace. It is stained red with ochre, and stands in a quadrangle surrounded by high walls. In front of the principal entrance is the band room, where the priests beat a large drum three times a day. The central portion is supported by twelve curiously-carved pillars on a platform raised 4 ft. from the ground. Through the doors, plated with brass, the image of the goddess may be seen; in the porch are two bells. One of these bells was presented to the temple by a British Collector of

Mirzapur, after escape from shipwreck on the Ganges last century. The temple and the fine tank adjoining were constructed by a Mahratta Rani in the 18th century. As Durga is the terrific form of Siva's wife, and is said to delight in destruction, bloody sacrifices of goats are offered to her here.

From this temple, which is quite close to Asi but over $1\frac{1}{2}$ m. from the other Ghats, the traveller may proceed to the Ghats, embarking either at the upper end of them from the Asi Ghat, or more conveniently from the central Dasaswamedh or Man Mandir Ghat, and rowing slowly past in front of them. In the following account the Ghats are given in succession from the S., proceeding down stream.

The Asi Ghat is one of the five special places of pilgrimage in Benares. The channel of the Asi, which here falls into the Ganges, is dry during the cold weather, but is about 40 ft. broad. The steps at the Ghat are a good deal broken. It is the *nearest* from which to cross to Ramnagar, the palace of the Maharaja of Benares, but there is a ferry actually at Ramnagar, with a metalled road running from the city to Ramnagar ferry: so there is no particular object in crossing from Asi, and the Ramnagar ferry affords a very fine view of the city. The next Ghat is the *Lala Misr Ghat*, which belongs to the Maharaja of Rewah. At the N. end of the *Tulsi Ghat*, which follows, huge masses of masonry have fallen, and lie on the river's edge; this Ghat is named after Swami Tulsi Das, the translator into Hindi of the Sanskrit epic of the *Ramayana*. The *Janki Ghat* is quite new; at the top of the steps are four Siva temples with gilded pinnacles, and behind them is the fine Lularik well. At the foot of the Ghat is the pumping station of the Benares Water Works. The

Bachhraj Ghat belongs to the Jains, who have built three temples on the bank of the river. Next comes the *Sivala Ghat*, where the fort in which Chait Singh resided stood. It is a handsome building, and appears as fresh as when first constructed. In the upper part of the N. wall are five small windows in a row, from one of which Chait Singh made his escape when he fled from Warren Hastings in 1781. It is now called the Khali Mahal, or "empty palace," and was repurchased by the present Maharaja of Benares four or five years ago. In this building two companies of Sepoys and three young officers, who were sent by Hastings to arrest Chait Singh, were massacred by a mob which discovered that the soldiers had come without ammunition. When fresh troops reached the palace Chait Singh had fled. The graves of the three officers, distinguished by a memorial tablet, lie in a narrow street, a short distance to the back of the palace. There is a memorial in the Cantonment churchyard. The *Sivala Ghat* is one of the finest of all the Ghats. Part of it is assigned to the religious ascetics called Gusains. The next is the *Dandi Ghat*, and is devoted to the staff-bearing ascetics called Dandi Pants. It is also very fine. The *Hanuman Ghat*, which follows, is large and generally crowded; at the head of it is a temple of the Monkey God. At the *Smashan Ghat*, which is used as a subsidiary cremation ground, wooden pyres may be seen being built, while bodies wrapped up in white or red cloths lie with their feet in the Ganges ready to be burned.

Passing the *Lali Ghat*, the *Kedar Ghat*, which comes next, deserves attention as one of the finest and loftiest of all. The Kedar temple just above Kedar Ghat is the popular shrine of the Bengalis, who inhabit this quarter of the city. According to the

religious books of the Hindus, the city is divided into three great portions — Benares, Kasi, from whence the popular name, and Kedar. Kedar is a name of Siva, but it also signifies a mountain, and especially a part of the Himalayan mountains, of which Siva is the lord, hence called Kedarnath. His temple, at the head of the steps, is much resorted to by the Bengali and Tilanga pilgrims to the city. It is a spacious building, the centre of which is supposed to be the place where Kedarnath dwells; the interior can be seen from the doorway. At the four corners are Sivalas, with cupolas. There are two brass figures, hidden by a cloth, which is removed on payment of a fee. The walls and pillars are painted red or white. There are also two large black figures, which represent *dwarpals*, or janitors; each has four hands holding a trident, a flower, a club, and the fourth empty to push away intruders. Half-way down the Ghat is a pool cut in the steps called the Gauri Kund, or "well of Gauri," Siva's wife, the waters of which are considered efficacious in curing fevers, dysentery, etc.; on the steps of the Ghat are many lingam emblems of Siva. The Mansarowar Ghat (built by Raja Man Singh) leads to the Mansarowar tank, round which are sixty shrines, now very dilapidated. Manas or Mansarowar is a lake in the Himalayan Mountains, near Kailas, or Siva's fabulous heaven. Near the tank at Benares so-called is a stone $4\frac{1}{2}$ ft. high and $15\frac{1}{4}$ ft. in periphery, which is said to grow daily to the extent of a sesamum seed. In a street to the E. of the tank are figures of Balkrishna, or the infant Krishna, and Chatarbhuj or Vishnu. The head of the Narad Ghat, named after the famous Rishi, winds up picturesquely under two fine pipal trees. At the Chauki Ghat, under a pipal tree, are many idols and

figures of snakes. In a street close by, called Kewal, is a figure of Durga with ten arms.

The next Ghat, where the stairs ascend into a large house or *sarai* built by Amrit Rao for travellers, is the kaja Ghat. On leaving it the traveller reaches the Someswar Ghat, so called from the adjacent temple of the moon, *Soma* being the "moon," and *Iswar* "lord." At this Ghat every kind of disease is supposed to be healed. Close by is an alley, in which is the shrine of Barahan Devi, a female Æsculapius, who is worshipped in the morning, and is supposed to cure swollen hands and feet. The Chausathi Ghat is one of the most ancient at Benares. The Rana Ghat, next to it, built by the Maharana of Udaipur, is not much frequented. The Munshi Ghat is the most picturesque of all the Ghats at Benares. It was built by Munshi Shri Dhar, Diwan of the Raja of Nagpur, and now belongs to the Maharaja of Darbhanga (p. 420). The fine Ghat between this and the Dasaswamedh Ghat was built by Ahalya Bai, the famous Mahratta Princess who governed Indore from 1765 to 1795 (pp. 123-4).

The Dasaswamedh Ghat is one of the five celebrated places of pilgrimage in Benares, the other four being the junctions (*sangam*) of the Asi and Barna with the Ganges, and the Manikarnika and Panchganga Ghats. It is especially thronged during eclipses. Here Brahma is said to have offered in sacrifice (*medh*) ten (*das*) horses (*aswa*), and to have made the place equal in merit to Allahabad. This was the only approach to the river between the two extreme ends of the town, until lately the Municipality opened up another but much less important road at Mosanghat.

At the S. end of the Ghat, which should be visited on foot, is a low whitewashed shrine of Sitala, the

goddess of smallpox, and of the presiding deity of the Ghat, figured under a brass lingam. Farther on at the Ghat are life-size stone figures in niches of the Ganges, Saraswati, and Jumna rivers, and of Vishnu, the Trimurti or Trinity, and the Narsingh or lion-man incarnation of Vishnu, which are passed on the way to the **Man Mandir Ghat** and the Observatory, much admired by some experts: the best old Hindu building in Benares. This lofty building gives a fine appearance to the Ghat, and commands a beautiful view of the river. It was erected by Raja Jai Singh, the founder of Jaipur, in Rajputana (see p. 192), with four other observatories—at Delhi, Muttra, Ujjain, and Jaipur. On entering the Observatory, the first instrument seen is the **Bhittiyantara**, or "mural quadrant." It is a wall 11 ft. high and 9 ft. $1\frac{1}{2}$ in. broad, in the plain of the meridian; by this are ascertained the sun's altitude and zenith distance, and its greatest declination, and hence the latitude. Then come two large circles, one of stone and the other of cement, and a stone square, used, perhaps, for ascertaining the shadow of the gnomon and the degrees of azimuth. The **Samratyantra** seen next is a wall which is 36 ft. long and $4\frac{1}{2}$ ft. broad, and is set in the plane of the meridian. One end is 6 ft. $4\frac{1}{4}$ in. high, and the other 22 ft. $3\frac{1}{2}$ in., and it slopes gradually up so as to point to the North Pole. By this, the distance from the meridian, the declination of any planet or star and of the sun, and the right ascension of a star, are calculated. There are also a double mural quadrant, an equinoctial circle of stone, and another **Samratyantra**. Close by is the **Chakrayantra**, between two walls, used for finding the declination of a planet or star; and near it a **Digamsayantra**, to find the degrees of azimuth of a planet or star. The instruments are fully described in a leaflet

obtainable at the Observatory. (See also the account of the Jaipur Observatory, p. 193.)

The **Mir Ghat** leads up to the **Dharm Kup**, or Sacred Well, and the **Lalita Ghat** to the **Nepalese Temple**, a picturesque object, but disfigured by indecent carvings; they do not catch the eye, and if the attendant can be discouraged from pointing them out, nobody need keep away on their account. This does not resemble in the least the Hindu temples.

The famous **Golden Temple** (someway from the river, see p. 69) is between this Ghat and the **Jalsain Ghat**, or **Burning Ghat**, which lies beyond the **Nepalese Temple** on the down-stream side, and is crowned by a mass of temples and spires. Numbers of cremations are usually in progress on the spot, and many sati stones will be noticed all round it; it is naturally regarded by the Hindus as one of the most holy places in the whole of Benares.

The **Manikarnika Ghat** is considered the most sacred of all the Ghats, and in November is visited by multitudes of pilgrims. Just above the flight of steps, which are enclosed by piers running out into the river, is the **Manikarnika** well, or pool, and between it and the steps is the temple of **Tarkwar**. The well has its name from *Mani*, "a jewel," and *Karna*, "the ear," **Devi** or **Mahadeo** having dropped an ear-ring into it. During an eclipse of the sun it is visited by great numbers of pilgrims. The well, or, more properly, tank, is 35 ft. square, and stone steps lead down to the water. Offerings of the **Bel tree**, flowers, milk, sandalwood, sweetmeats, and water are thrown into it, and the smell arising from it is in consequence anything but pleasant. Between the well and the Ghat is the **Charanpaduka**, a round slab projecting slightly from the pave-

ment, on which stands a pedestal of stone; on its marble top are two imprints, said to have been made by the feet of Vishnu. The privilege of being burnt at the Charanpaduka, instead of the usual burning Ghat, is confined to a few families, and is much prized. At the second flight of steps of this Ghat is a temple to Siddha Vinayak, or Ganesh. The idol has three eyes, is painted red, and has a silver scalp and an elephant's trunk covered with a bib. At the feet of the image is the figure of a rat, which is the vahana, or "vehicle," of Ganesh.

The Scindia's Ghat was intended to have been one of the grandest of the whole front, but, owing to the great weight of the superstructures, the foundations have sunk several feet, and are still gradually sinking. It has been in this state for nearly a century. The temple on the left of the S. turret is rent from top to bottom, as are the stairs leading to the curtain between the turrets. It was built about 1830 A.D. by Baiza Bai, widow of Daulat Rao Scindia, who constructed the colonnade round the Well of Knowledge. Passing two Ghats, the next reached is the Ghatsawhich was built by the Nagpur Raja one hundred years ago, and is very massive and handsome. The following picturesque Ghat was built by the last of the Peshwas. The Ram Ghat, which comes next, was built by the Raja of Jaipur.

The next large Ghat is the Panchganga Ghat, beneath which five rivers are supposed to meet; it was built by Raja Man Singh, and carries a number of picturesque shrines. Above it rises the mosque of Aurangzeb, called in old maps the "Minarets." This was built for the Emperor by a Hindu of the name of Madhu Das, and the minarets are still called

after him. It occupies the site of a temple of Vishnu, and was erected to emphasise the predominance of the Muhammadan religion. The view from the top of the minarets, which rise nearly 150 ft. above the platform of the mosque, and are slightly out of the perpendicular, is extremely fine. If the full climb is too much, it is quite worth while to ascend to the roof of the building. The two *stupas* at Sarnath can be seen from here, and the Mirzapur Hills.

Four unimportant Ghats lie between this and the second Sitala Ghat, below which the Gao, Gai, or Gau Ghat, so called from the number of cows that resort to it, and also from the stone figure of a cow there, stands out into the river. There are no steps, and cows can reach the river without mishap. This is the real reason for the name.

The Trilochan Ghat, the next reached, has two turrets in the river, and the water between them possesses a special sanctity. The pilgrims bathe in the Ganges at this Ghat, and then proceed to the Panchganga and there bathe again. At the head of the Ghat is a temple of Trilochan, or the Three-Eyed, another form of Siva. The Prahlad Ghat is the last masonry Ghat of all, and from it a fine view is obtained of the whole river front. Farther down the stream is the site of the old Raj Ghat ferry, now spanned by the great Dufferin Bridge; also by a pontoon bridge, except in the rains, just above the Dufferin Bridge. These bridges are near the Raj Ghat: the junction of the Ganges and Barna is $\frac{1}{2}$ m. lower down. Raj Ghat fort dates from antiquity: newly reoccupied and reconstructed during the mutiny, it is now dismantled. The clusters of temples at the junction are very picturesque here in the ruins.

The Golden Temple is dedicated to Biseswar (Sanskrit, Visvesvara), or Siva, as the Lord of the Universe. The temple, which is surrounded by very narrow, crowded streets, is in a roofed quadrangle, above which rises the tower. At each corner is a dome, and at the S.E. a Sivala. Opposite the entrance, with its finely-wrought brass doors, is a shop where flowers are sold for offerings, from the upper storey of which, on a level with the three towers of the temple, the interior may be seen. The red conical¹ tower (left) is that of Madadeo's temple; next to it is a gilt dome, and on the right is the gilt tower of Biseswar's temple. The three are in a row in the centre of the quadrangle, which they almost fill up. Two of them are covered with gold plates, over plates of copper which cover the stones. The expense of gilding was defrayed by Maharaja Ranjit Singh, of Lahore. The temple of Biseswar is 51 ft. high. Between it and the temple of Mahadeo hang nine bells from a carved stone framework. One of these, and the most elegant, was presented by the Maharaja of Nepal. The temple of Mahadeo was built by Ahalya Bai, Princess of Indore (pp. 123-4). Outside the enclosure is the Court of Mahadeo, where on a platform are a number of lingams, and many small idols are built into the wall. They are thought to have belonged to the old temple of Biseswar, which stood N.W. of the present one, and of which the remains are still to be seen, forming part of the mosque which Aurangzeb built on them.

In the quadrangle between the mosque and the Temple of Biseswar is the famous Gyan Kup,

"Well of Knowledge," where, according to Hindu tradition, the emblem of Siva took refuge when the original temple was destroyed, and still is. The well is protected by a high stone screen, and covered by a stone canopy, and the worshippers, an eager and excited crowd, by whom the quadrangle is always thronged, are no longer permitted to cast offerings of flowers, etc., into it. The roof and colonnade of the quadrangle were built by Baiza Bai, widow of Daulat Rao Scindia. On one side of the colonnade is a stone bull, or Nandi, given by the Raja of Nepal, 7 ft. high. On another side is an iron railing, within which is a shrine of white marble and one of white stone, and a carved stone support, from which hangs a bell. Around are many richly-carved small temples, particularly one, to the S. of Biseswar; the gateways of the courtyard are similarly carved, and small gilded spires add to the picturesqueness of the scene.

The great Muhammadan Mosque, usually ascribed to Aurangzeb, but probably built by Jahangir, lies to the N.W. side of the Gyan Kup. The two octagonal minarets are 232 ft. above the Ganges. The Hindus claim the courtyard between it and the temple wall, and in consequence it is entered from the side. The beautiful columns in the front of the mosque belonged to the destroyed temple, of which further fine remains may be seen at the back of the mosque. The bigoted Emperor Aurangzeb (1658-1707) is credited with the destruction of the most ancient and sacred Siva temple at Benares and the erection of the mosque on its site. During the period of nearly three centuries since the mosque was built not a stone has been loosened. A goodly number of the faithful assemble here on Fridays; at other times it is less frequented. The back of

¹ These conical towers, almost universal in Hindu temples, are called *Sikhars*. The origin of their peculiar form is unknown. See Fergusson's *Indian Architecture*, I, 322.

the mosque showing the old Hindu architecture should be examined. Other Muhammadan monuments of interest in Benares are: the tomb of *Lal Khan*, 1725 A.D., which lies in the southern corner of the Raj Ghat plateau; the *Palang Shahid*, a little Muhammadan cemetery to the N.W. of the tomb; and the *Ganj-i-Shahidan* Mosque, a little to the S. of Kasi railway station, which is an instance of the conversion of an old temple, supposed to be Buddhist, to the uses of the Muhammadan religion.

Just outside the Golden Temple is the shrine of *Sanichar*, or *Sani*, the planet Saturn or its regent. The image is a round silver disc, from which hangs an apron, or cloth, which prevents one remarking that it is a head without a body. A garland hangs from either ear, and a canopy is spread above. A few steps beyond this is the Temple of *Annapurna*, a goddess whose name is compounded of *Anna*, "food," and *Purna*, "who is filled." She is supposed to have express orders from *Biseswar* to feed the inhabitants of Benares, and in front of this temple are always a number of beggars. It was built about 1725 by the Peshwa of that date, *Baji Rao I.* There are four shrines in this temple dedicated to the *Sun*, *Ganesh*, *Gaurisankar*, and the monkey-god *Hanuman*. Near it again is the temple of *Sakhi Vinayak*, the witnessing deity (p. 68). It was built in 1770 by a *Mahratta*, whose name is not recorded. Here pilgrims, after finishing the Panch Kosi circuit round Benares, get a certificate of having done so. S. of the temple to *Sani* is that of *Shukareswar*, *Shukar* being the planet *Venus*, where prayers are made for handsome sons. Between the Temple of *Annapurna*, and that of *Sakhi Vinayak* is a strange Figure of *Ganesh*, squatting on a platform raised a little above the path.

This ugly object is red, with silver hands, feet, ears, and elephant's trunk.

The narrow streets and lanes which connect the Ghats with one another, and the parts of the city lying more remote from the river front, will be found exceedingly interesting; but they cannot be described as clean and sweet, and they must be traversed on foot, though a carriage proceeding along the broader streets at the back can be rejoined at intervals. This mass of narrow streets, too narrow for wheeled traffic, and overhung by lofty houses, is known as the "*Pukka Mahals*" and is one of the most characteristic features of Benares. It comprises the whole of the city nearest the river, but is of varying depth and covers altogether several square miles. Almost every corner of the *Pukka Mahals* is picturesque. The effect of the closely crowded houses can be seen from the top of *Aurangzeb's* mosque on the river bank.

Among the remaining objects of interest in Benares may be mentioned the *Bhaironath*, *Dandpan*, *Bridhkal*, and *Kameswar* temples, and the *Arhai Kangura* mosque, all situated on the N.W. outskirt of the city. The first, built by *Baji Rao II.* in 1825, is remarkable for a fine tamarind tree. The idol in the temple is considered to be the *Kotwal*, or magistrate of the city, who rides about on an invisible dog. There is an image of a dog close to the idol, and the confectioners near sell images of dogs, made of sugar, which are offered to it. A *Brahman* waves a fan of peacock's feathers over visitors to protect them from evil spirits, and they in return must drop offerings into the cocoanut shell he holds. The idol is of stone, with a face of silver and four hands. The *Dandpan* temple close to this contains the staff of *Bhairon*, a stone shaft 4½ ft. high, and the famous *Kal*

Kup, or Well of Fate, into which the sunlight falls from a hole in the wall above. The dingy Bridhal temple contains a well and a small tank renowned for the curing of diseases. Near it is the Alamgiri mosque, constructed, in the second year of the reign of Aurangzeb, of pillars from an old temple. The Arhai Kangura Mosque, which, with the Kameswar temple of the God of Love, lies to the N.W. of Bhaironath and near the Machodri garden, is built of old Hindu remains, like the Ganj-i-shahid (p. 64). It is very old, of the 12th century, and quite interesting. In the Victoria Park is a statue of the Queen-Empress. The King Edward VII. Hospital, built by gentry of Benares to commemorate the visit of Edward VII., then Prince of Wales, to the city in 1876, is on the main road from the Cantonment to Raj Ghat. The Town Hall was built at the sole expense of a Maharaja of Vizianagram. The visitor may also look for Lord Curzon's historical tablets at (1) Madho Das's garden, (2) Nandeswar House, (3) Mint House opposite (2), (4) Sivala, (5) Tulsi Das's house, behind the Kotwali (not the one on the river); also for Swami Bhashkaranand's marble tomb and shrine combined, in white marble, next to the Monkey temple, all well worth seeing; also a Raja's temple overhanging Manikarnika Ghat, one of the best temples from an artistic point of view.

The palace and fort of the Maharaja of Benares at Ramnagar, on the right bank of the Ganges, may be visited by permission, to be obtained from the Secretary to His Highness. It stands above a fine Ghat, and affords a splendid view of the river front of Benares. The Maharaja was, a few years ago, granted the powers of a Ruling Chief in his domain.

There are no European shops,

but petrol can sometimes be obtained at a shop which supplies motor requisites.

SARNATH.

Sarnath,¹ the site where Buddha preached, is some 4 m. N. of Benares, not far from the high road to Ghazipur, which is left at the third milestone. Shortly after turning to the left two towers are seen—the Chaukhandi, on a hill; the other the Dhamekh² *stupa* (Fergusson's *Ind. Arch.* 1, 73). The road journey is an easy drive and the road is metalled all the way: it would be a waste of time to go by train, but Sarnath can also be reached by the line B. & N.W. from Benares to Mau junction and Bhatni. A more direct route, of which traces still remain, seems formerly to have connected Benares with Sarnath.

According to the earliest information, Sarnath was known as the "Deer Park," or "Fall of the Sage," and is prominent in one of the Jataka, or Birth-stories of the Buddha. In his lifetime his five early attendants retired there for meditation after forsaking their master; there Buddha first made known his doctrines to the world. Buddhists have always revered the spot where he sat and preached as holy ground. The Chinese travellers—Fa-Hian, at the beginning of the 5th century; Hiuen Tsang, between 629 and 645 A.D.—visited the site. The former mentioned two monasteries as existing in the Deer Park, and four memorial topes, which he saw. The latter, Hiuen Tsang, described more fully the whole *sangharāma* (monastery) as he saw it. He mentioned 1500 priests in the convent, a *vihāra* 200 ft. high, a figure

¹ See the *Guide to the Buddhist Ruins of Sarnath*, by Dayaram Sahni, M.A., Superintendent, Hindu and Buddhist Monuments, Northern Circle. Calcutta, 1917.

² Dhamekh is a corruption of Dharmaksha, the pondering of the Law.

of Buddha represented as "turning the wheel of the Law"—i.e., preaching—Asoka's stone *stupa*, a stone pillar 70 ft. high, three lakes, other monuments, and the most magnificent *stupa* of all, 300 ft. high. Sarnath was probably destroyed when Kutb-ud-din, Shahab-ud-din Ghori's General, devastated Benares in 1194 A.D. It is certain that after the overthrow of Buddhism in India Sarnath was completely deserted.

The *stupa* locally known as the Dhamekh Tower (a little to N.E. of a modern Jain temple) consists "of a stone basement 93 ft. in diameter and solidly built, the stones being clamped together with iron, to the height of 43 ft. Above that it is in brickwork, rising to a height of 104 ft. above the terrace of the temple, and 143 ft., including its foundations. Externally the lower part is relieved by eight projecting faces, each 21 ft. 6 in. wide and 15 ft. apart. In each is a small niche, intended, apparently, to contain an image, and below them, encircling the monument, is a band of sculptured ornament of the most exquisite beauty. The central part of this band consists of geometric patterns of great intricacy, but combined with singular skill, while above and below are rich floral arabesques, the whole being peculiarly characteristic of the art of the Imperial Guptas. The carvings round the niches and in the projections have been left unfinished, and judging by the absence of any fragments either in stone or brick or plaster around the *stupa*, it seems not improbable that the upper part of the tower was never completed."¹

In his examination of the Dhamekh Tower General Sir A. Cunningham found, buried in the brickwork, an inscribed stone with the Buddhist formula "Ye dhamma hetuprabhava," etc.,

¹ Memorandum by the Director-General of Archaeology in India.

said to be in characters of the 7th century, a record held by the latest opinion to be contemporary with the last rebuilding of the *stupa* (Fergusson, *Ind. Arch.*, i., 72-75, ascribed the erection of this Sarnath monument to the 11th century). It is believed that the lowest stratum of brickwork represents the first *stupa* on this spot, which was afterwards built over and enlarged to the dimensions as they now appear.

Some 500 ft. to the W. of the Dhamekh Tower there was another, called the Jagat Singh *stupa* (from the name of a Diwan of the Raja Chait Singh, of Benares, who had it dug for bricks, now a mere shell, all the core having been removed; the innermost existing ring has a diameter of over 44 ft. On the discovery of this *stupa* in 1794 and the valuables found therein, Sarnath became a favourite hunting-ground for treasure-seekers, and cartloads of images and terracottas are said to have been carried away. The sculptures and carvings found have been distributed between the Indian Museum, Calcutta, and the handsome Museum at Sarnath itself, erected in a style in keeping with the associations of the place. Numerous finds, made before and since 1905, are arranged in it, and there is a good but expensive catalogue with a useful introduction. Since 1905 the Archaeological Department have undertaken the thorough exploration of the whole Sarnath site, and have done a good deal of work here.

A conspicuous structure is to be seen some 20 yds. due N. of the Jagat Singh *stupa*, named the "Main Shrine," which both "served as a shrine and formed the centre of numerous smaller memorials built round it. It is a rectangular building measuring 95 ft. by 90 ft., with doubly-recessed corners, and still standing to a height of some 18 ft. It is built partly of stone, partly of brick, and much of the

former material, at any rate, has been taken from earlier structures, notably of the Gupta period. From the thickness of the original walls and the additions subsequently made to them in the interior of the building, it is evident that they were intended to support a massive and probably lofty superstructure, but what design this superstructure had there is at present no means of ascertaining." A small *stupa* in the S. chapel of the Main Shrine is surrounded by a stone railing, one of the most interesting and valuable treasures discovered at Sarnath, cut entire from one single block of stone, and the chiselling and polishing of the stone have been executed with a skill which it would be impossible to surpass. Two inscriptions noticed on it are not earlier than the 3rd or 4th century A.D., but its workmanship connects it with the epoch of the Emperor Asoka (272-231 B.C.). The Main Shrine belongs approximately to the 11th century A.D. Round the Main Shrine was a concrete pavement, 40 ft. square, covered with numerous chapels, *stupas*, and monuments of brick, plaster, and stone, ranging from the Kushana period (45-225 A.D.) to the 11th or 12th century.

To the W. of the Main Shrine is the broken shaft of the Asoka sandstone column. There is only a stump *in situ* now: the capital is in the Museum, where it has the place of honour. The portion still standing measures 16 ft. 8 in. in height, with a diameter of 2 ft. 6 in. at the bottom. The upper part of the shaft, with the capital, lay broken against the side of the shrine. The whole height, including the capital, appears to have been about 50 ft. The capital, "which measures 7 ft. high, is of the Persepolitan bell-shaped type, surmounted by four magnificent lions sitting back to back with a wheel between them—symbolising the law of the Buddha, which was

first promulgated at Sarnath. Beneath the lions is a drum ornamented with four animals in relief—viz., a lion, an elephant, a bull, and a horse—separated from each other by four wheels. The four crowning lions and the reliefs below are wonderfully vigorous and true to nature, and are treated with that simplicity and reserve which is the keynote of all great masterpieces of plastic art. India certainly has produced no other sculpture to equal them. That the column was set up by the Emperor Asoka is evident not only from its character and style, but from the presence of an edict of that Emperor on the portion still *in situ*. This edict enjoins that whatsoever monk or nun creates schisms in the *sangha* should be made to put on white clothes and reside outside the convent. His Sacred Majesty further urges that his order should also be made known to the lay-members. The superintendents of the sacred law should also familiarise themselves with the edict, and make it known in their own circles and elsewhere."

Most of the area excavated under the pavement is occupied by a large rectangular chamber or court measuring 48 ft. by 28 ft., with a variety of other structures adjoining it. This chamber was surrounded on three sides by a railing of Mauryan date (321-184 B.C.), built into the brickwork of the walls. Much of this railing has, unfortunately, perished, but the position of all the columns and cross-bars is clearly marked by indentations in the brickwork. The excavations have been extended some distance on every side of the Main Shrine, disclosing numerous small chapels and *stupas*, separate and in groups, some in perfect preservation, and yielding numbers of sculptures from the relic chambers. The Northern—called the Monastery—Area has already revealed parts of four monasteries, three being of

the 3rd, the largest of the 11th or 12th century A.D.

Much of the débris has been cleared from a large *stupa* about half a mile to the S. of the Dhamekh Tower. The mound in which this *stupa* lay buried is known locally as the Chaukhandi or "square" mound, and on its summit is an octagonal brick tower, erected by the Emperor Akbar in 1588 A.D. to commemorate a visit of his father, Humayun, to the spot. An inscription in Arabic characters on a stone slab above the doorway contains the following record: "As Humayun, king of the Seven Climes, now residing in paradise, deigned to come and sit here one day, thereby increasing the splendour of the sun, so Akbar, his son and humble servant, resolved to build on this spot a lofty tower reaching to the blue sky. It was in the year 996 A.H. that this beautiful building was erected." It is believed that the whole *sangharama* at Sarnath, as elsewhere, was surrounded by a massive circuit wall, 9 ft. thick and of very solid construction, which it is intended to follow up along its whole extent.

The sculptures¹ brought to light at Sarnath "divide themselves naturally into four groups—the first comprising those of the Mauryan epoch, the second those of the Kushana epoch, the third belonging to the age of the Imperial Guptas, and the fourth including all later examples. The chief examples of Mauryan work are the Asoka column and capital, the railing in the Main Shrine, portions of another railing, and two separate capitals. The Kushana group is represented mainly by two colossal pieces of carving, one a Bodhisattwa statue standing

9½ ft. high, the other a gigantic umbrella measuring 10 ft. across, and adorned on its under surface with designs of animals, religious symbols, and geometric patterns." One fact, now made abundantly clear, is that the most important building age at Sarnath was the age of the Imperial Guptas (320-455 A.D.); yet more—they establish the existence of an important and wide-reaching school of sculpture at that epoch, and open up for us an almost new chapter in the history of Indian Art. The Gupta origin of the famous Dhamekh *stupa* is now no longer doubted; its decoration is reproduced in one or other of the Gupta sculptures recently unearthed. "This Gupta style exhibits many semi-classical affinities, due to the influence exerted on it by Mauryan, and still more by Gandhara Art. Its pervading spirit, however, and the decorative 'motifs' which peculiarly distinguish it, are essentially and indisputably Indian. Of these motifs the most characteristic are floral arabesques treated with superb grace and boldness, and often enriched by the addition of human figures clinging in supple attitudes among the foliage. Geometric designs, too, of an intricate but never bewildering nature, play an important rôle in the schemes of decoration; while motifs borrowed from jewellery are perhaps more conspicuous in this than in any other school of Indian Art. No less characteristic is the treatment of human figures, which are free from the exaggerated development that repels us from most Indian Sculpture, and which at the same time possess other distinguishing traits, that make them easily recognisable."

Among the Gupta sculptures are two bas-reliefs of special interest—one in eight panels, referring to the eight chief places of Buddha's life, while the other depicts events thereof. There are various in-

¹ See *Catalogue of the Museum of Archaeology, Sarnath*, by Daya ram Sahni, M.A., Assistant Superintendent Archaeological Survey, Calcutta, 1914. Rs. 3/12; obtainable from the Custodian of the Museum.

scriptions, also, of importance on statues, images, and seals, which help to fix dates and the name of the monastery where Buddha's first sermon was delivered—namely, Dharmachakrapravartana vihara, or, short, Dharmachakra. The

difficulty is to identify the buildings as they now are with those mentioned by the Chinese travellers. Two of the buildings, the Monastery No. 1, and the Main Shrine, are later than the date of Huen Tsang.

ROUTE 5.—CALCUTTA CITY AND ENVIRONS

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History.—The capital of the Bengal Presidency¹ is of more recent birth than the capitals of the two sister Presidencies, dating only from 1690, when Hooghly, at which a settlement had been established forty-eight years previously, was abandoned in favour of the present site, on which the three villages of Sutanati, Kalikata, and Gobindpur then stood, Mr Job Charnock being the leader of the merchants who settled here. These estates were formally sold to the East India Company by the Governor of Bengal, Prince Azim, son of the Emperor Aurangzeb, in 1700, some four years after the construction of the old Fort William (p. 89). In 1707, Bengal, where Calcutta then had a population of 10,000, was formed into a separate Presidency independent of Madras; and it continued to flourish, owing to its favourable position at the gate of the principal waterways of N. India, until 1756, when, the fort not being defensible, it was attacked and taken by the Nawab of Murshidabad, Suraj-ud-daula, in return for the burning of Hooghly by British vessels. Most of the British, including the Governor, fled down the river in ships to Falta; those who remained and attempted a defence became the victims of the historical tragedy of the Black Hole on 20th to 21st June (see p. 90). Late in December Colonel Clive arrived with troops from Madras and with ships under Admiral Watson. Calcutta was retaken by them on 2nd January 1757; the Nawab's position was attacked on 4th February, and his forces were withdrawn from near the town. After some negotiations an agreement was entered into by which the

Nawab promised to restore the trading privileges of the Company and return the property plundered in Calcutta. Shortly afterwards a conflict ensued between the French and British, which ended in the capture of Chandernagore by the latter on 23rd March. Encouraged by the French in his service and by proffers of support from the Mahratta Chief of Nagpur, Suraj-ud-daula ultimately refused to accept an exclusive alliance with the British, and this led in due course to the Battle of Plassey, on 23rd June 1757, and Suraj-ud-daula's death. Mir Jafir, the next Nawab, gave the English the zemindari of the 24 Parganas, as well as a free gift of the town and some of the adjacent villages. Heavy compensation was paid to the merchants and the Company's servants for their losses, and permission was granted to establish a mint. From this date the town enjoyed uninterrupted prosperity. With part of the compensation money received from the Nawab, Gobindpur was cleared of its inhabitants and the foundations of the present fort were laid. In 1773 the present Fort William was, after construction for fifteen years, completed at a cost of two millions sterling, half a million of which was spent to protect the west face from the erosion of the river. The clearing of the jungle round the fort led to the formation of the *Maidan*, and the European quarter, which was located between Canning Street and Hastings Street, began to extend southwards along Chowringhi. In 1774 Warren Hastings, who had become Governor of Bengal two years previously, was made the first Governor-General of Bengal, and given authority over Bombay and Madras, and the Supreme Court of Calcutta was established. The old Cathedral of St John was built between 1783 and 1787, and the Bishopric of Calcutta was created in 1813, the first Bishop being Dr Middleton,

¹ Busteed's *Echoes from Old Calcutta* contains much information about the place at the end of the 18th century. Blechynden's *Calcutta, Past and Present*, and Firminger's *Guide to Calcutta*, are also full of interest.

and the second (1823), Reginald Heber. Government House was erected between 1797 and 1803, the Town Hall in 1804, and the Mint between 1824 and 1830, while the Botanical Gardens at Sibpur, on the right bank of the Hooghly, were created after the scheme was approved in 1787. It will thus be seen that some of the finest buildings in Calcutta are of much earlier date than those of Bombay and Madras. In 1852 Calcutta was created a Municipality—although there had been some semblance of municipal government since 1727—and in 1854 passed with the rest of Bengal under the direct control of a Lieutenant-Governor; in 1857 it received its University. In 1862 the Legislative Council of the Lieutenant-Governor was created, and in 1865 the Corporation, consisting of Justices of Peace for the town of Calcutta in lieu of the Municipality. The Chamber of Commerce dates from 1834, and the Port Trust Commission, which consists of fifteen members, from 1870 (see p. 78).

The population of the city alone is now 896,067; with the suburban municipalities it is 1,043,307; and with Howrah it is 1,222,313. In 1911 it was distributed as follows:—

Hindus	604,853
Muhammadians	241,587
Christians	39,551
Jews	1,919
Others	8,157

The increase has been very large since the first census was taken in 1872, but the area of the city census has also changed greatly. The census of 1911 gave an increase of only 5.7 per cent. over that of 1901, the reason being that there has been a movement of the population to the suburbs of Calcutta owing to the high cost of living and the clearing out of insanitary areas. Early in the last century the population was about 200,000, and in 1850, 400,000.

The Port of Calcutta is the leading port of the East. Its principal features are worthy of the attention of all visitors. Calcutta was originally selected as a site for trade. It stands on the left bank of the Hooghly, the great waterway which carries to sea the immense volume of exports brought down to Calcutta by the railways, and by which the bulk of the imports enter. The Port proper extends from Garden Reach to Cossipore, over 9 m. There are anchorages for ocean-going steamers, docks, jetties, and wharves. Every facility is afforded to trade, and improvements are always in progress. From the Calcutta-Howrah pontoon bridge the distance is 82 m. to the Sagar Island Lighthouse at the entrance to the river, and 122 m. to the Eastern Channel Lighthouse, where the pilot vessel awaits ocean-going steamers. The navigation of the Hooghly requires the service of skilled pilots and the unintermitted survey of the shifting channels of the river.

The enormous trade of the Port has been largely affected by the War, so that the latest figures available (of 1915-16) would not be correct for normal times. The expansion of trade appears from the following figures: in 1901-2 (excluding inland vessels and coasting craft) 1347 vessels of 4,575,267 tons gross entered the Port; in 1915-16 there were 1150 vessels of 4,848,961 tons. In the same period the income of the Port Trust rose from £520,000 to £1,062,364 (including War surcharges amounting to £179,845). The value of the total foreign trade (merchandise only) of the Port has risen from 60½ million pounds in 1903-4 to £93,050,815 in 1915-16; and the grand total of trade (foreign, coasting, inland vessels together) from 86½ million pounds to £109,069,400. The principal articles of export are jute, raw and manufactured,

grains and pulses, tea, oil-seeds, hides and skins, opium, shellac, raw cotton, manganese and pig-iron; the coal exports have risen from 78,000 tons in 1895 to 1,610,645 tons. The imports consist chiefly of cotton goods, metals, sugar, illuminating and lubricating oils, machinery, railway materials, hardware, cutlery, medicines, paper, rice from Burma, sugar from Java, miscellaneous goods of European manufacture. The value of the imports was £36,456,280 compared with £58,762,374 of exports.

A most useful ferry service on the river was started in 1907, with seven steamers, to which four were added in 1910. There are now thirteen. These steamers ply from daylight to dark, some on crossings, others on the round trips in the Northern and Southern parts of the Port. About 9,795,700 passengers used this steamer ferry service in 1915-16. Starting from Chandpal Ghat, near the High Court, a visitor can make an enjoyable trip up and down the river. The docks, wharves, landing-stages, and other arrangements for trade and passengers will well repay a visit.

The Port is administered by the "Port Trust," which consists of the Chairman, usually a member of the Board of Revenue, five nominated and nine elected representative commissioners, and the Vice-Chairman, who is the administrative Head of the Port. The present Vice-Chairman, Mr H. J. Hilary, is now serving in France, and Mr S. C. Williams, the Secretary, is officiating for him. This "Port Trust" is one of the most efficient and successful bodies in India.

There are about 250 factories and mills in and, chiefly, round Calcutta, employing over 300,000 daily operatives.

Calcutta, for municipal purposes, is divided into four districts, comprising twenty-five wards. In

each district there is a resident District Engineer and a District Health Officer, who attend to all local needs. The income of the Corporation amounts to 11.4 lakhs, derived chiefly from a consolidated rate, a tax on trades and professions, and a tax on vehicles and animals. There is a municipal debt of 490 lakhs in the form of municipal loans.

The Corporation consists now of fifty members—twenty-five elected and twenty-five appointed by Government, or nominated by certain special bodies. The entire executive power is vested in the Chairman, who is appointed by Government, to be exercised subject to the approval or sanction of the Corporation or General Committee, whenever this is expressly directed in the Act. To the Corporation are reserved the right of fixing the rates of taxation and all those general functions which can be efficiently performed by a large body. The General Committee stands between the deliberative and executive authorities, and deals with those matters which are ill-adapted for discussion by the whole Corporation, but yet are too important to be left to the disposal of the Chairman alone. The present Corporation, which was created by the Act of 1899, and came into existence in 1900, has amply justified its existence, as very great improvements have been effected in water supply, drainage, road paving, and conservancy, and municipal amenities generally. The huge elevated iron reservoir at Talla, 2 m. N. of Calcutta, to give the city a continuous and increased water supply, which was recently completed, is the second largest of its kind in the world. There are now 276 m. of roads, 247 m. of sewers, 366 m. of filtered water main, and 274 m. of unfiltered water main, the latter being used for road watering and sewer flushing.

The further improvement

and expansion of Calcutta has, by an Act of 1911, been entrusted to a Board of twelve trustees, with a Chairman at the head, appointed by the Government, with certain guaranteed income from transfer duty, terminal tax on passengers, Customs duty on jute, and contributions from the Municipality and Government. The Trust have devised, and partly or entirely carried through, several important schemes for opening up congested areas, laying out or widening streets and providing open spaces. Substantial improvements are already noticeable in the neighbourhood of Kolutolla, N.W. of the Medical College Hospital, where highly insanitary *bastis* have been demolished and several fine wide streets have been laid out. A park and playground have been projected in Shambazar, and several wide roads driven through that highly congested area. Russa Road has been widened to 150 ft. and now gives a most pleasant drive from Chowringhi to Tollyganj. Large improvements have been made in the Bhowanipur area; two model dwellings on a sufficiently large scale have been constructed to house people dispossessed of their homes by the operations of the Trust.

Calcutta is situated in lat. $22^{\circ} 34'$, long. $88^{\circ} 24'$. It is the headquarters of the Government of the Lower Provinces of Bengal. The principal Lieutenant-Governors of Bengal since 1854 have been Sir F. J. Halliday, Sir J. P. Grant, Sir G. Campbell, Sir R. Temple, Sir Ashley Eden, Sir S. Bayley, and Sir C. Elliott. The Lieutenant-Governor, Sir John Woodburn, died in office in 1902. The last Lieutenant-Governor was Sir E. N. Baker, the Province being converted into a Governorship when Lord Carmichael of Skirling, G.C.I.E., K.C.M.G., entered on

office as Governor on 1st April 1912. He has been succeeded by the Earl of Ronaldshay, who took office on 26th March 1917. The transfer of the capital of India from Calcutta, and the creation of a Presidency of Bengal were announced by the King-Emperor at His Majesty's Darbar at Delhi on 12th December 1911, and, though this affected Calcutta to a certain extent, His Majesty, in replying to the Corporation's address in Calcutta, declared that it "must always remain the premier city of India."

(1) The Maidan and Quarters East and South of it.

The centre of Calcutta is the famous Maidan (plain, or park), bounded on the W. side by the Hooghly river and the Strand Road, and on the E. side by Chowringhi Road; it is nearly 2 m. long, and is $\frac{3}{4}$ m. broad at its head, and $1\frac{1}{4}$ m. broad at the S. end. Government House, the residence of the Governor, faces it on the N., while Belvedere, where the Lieutenant-Governors of Bengal lived, is not far removed from the Southern limit. In the centre of the W. side is Fort William, and on or near the E. side are the principal hotels, the United Service and Bengal Clubs, the Army and Navy Stores, and the Indian Museum; in the N.W. corner are the Eden Gardens, and in the S., from W. to E., are the Racecourse, the Victoria Memorial, in course of construction immediately N. of the old Presidency Jail (since dismantled and removed to Alipore), the Cathedral, and the Calcutta Club. The Strand Road above the river bank affords fine views of the shipping and water traffic; another main road, known as the Red Road, runs down the centre of the Maidan from N. to S.

Lord Curzon's Statue has been placed N. of the Victoria Memorial, on the new road constructed

across the *Maidan*, in continuation of the Theatre Road.

The *Eden Gardens*, for which Calcutta is indebted to the sisters of Lord Auckland, are beautifully laid out, and were for many years the principal evening gathering-place of Calcutta society. In them is the Calcutta Cricket-ground, and on the side of the water is a picturesque Burmese Pagoda brought from Prome, and set up here in 1856. Close to the S.W. gate is the statue of Sir William Peel, the famous Commander of H.M.S. *Shannon*, who served with his crew at Lucknow under Sir Colin Campbell (p. 411), and died of smallpox at Cawnpore after the final relief of the Residency; and on the N. side are the statues of Lord Auckland, Lord William Bentinck, and Lord Northbrook; Lord Canning, is N.E. of the gardens. W. of these, on the river bank, are Babu's Ghat (where is a swimming-bath), the boathouse of the Calcutta Rowing Club, the fine Outram Landing Ghat, recently constructed by the Port Commissioners for the convenience of passengers arriving and leaving by sea-going steamers, and the Chandpal Ghat, affording a fine view of the river. It was at this Ghat that the members of the Supreme Council sent from England, and Sir Elijah Impey and the Judges of the Supreme Court, landed in October 1774. A little farther up stream the building of the Bank of Bengal faces the Hooghly; and beyond this are the principal jetties extending for $\frac{1}{2}$ m. up to the floating bridge, 1500 ft. long and 48 ft. wide, constructed in 1873-74 at a cost of a quarter of a million. From Chandpal Ghat the broad Esplanade Row leads to the E., passing the High Court, the Town Hall, and Government House, and ending at Dharmtolla Street, from which point Chowringhi Road leads S. along the E. side of the

Maidan: and Bentinck Street, continued as Chitpur Road, leads to the extreme N. point of the city on the river bank.

The High Court, built in 1872, after the Town Hall at Ypres, is a fine building, lately considerably extended, with a tower 180 ft. high. The extension recently added is connected by an over-bridge: it contains the Session Court and some other Courts and offices. The Chief Justice's Court is in the S.W. corner. The Courts of Original Jurisdiction are at the N.E. and S.E. corners. In the E. face is the Barristers' Library. The Attorneys' Library is in the E. corner; and here is a portrait of Justice Norman. In other public rooms are portraits of Sir Wm. Burroughs, by Lawrence, 1818; Sir William Macnaghten, by Chinnery, 1824; Sir Elijah Impey, by Kettle, 1778; and the Honourable Shambu Nath Pandit, the first Indian Judge. In the Chief Justice's Court are the pictures of Sir R. Garth, and of Sir H. Russell, by Chinnery, 1872, robed in red; Sir John Anstruther, 1805; and Sir E. Impey, by Zoffany, 1782. At the head of the Chantrey's staircase is a statue of Sir Edward Hyde East, 1821. In the Judges' Library are six pictures of Justices Trevor, H. B. Harington, and John Russell Colvin, who died at Agra in 1857 (p. 237), and opposite these, of Sir Ed. Ryan, Sir Robert Chambers, and Sir Lawrence Peel. Among the records of the Court is that of the trial of Nuncomar, by Sir Elijah Impey and two other judges and a jury. There is a garden in the centre quadrangle, with a fountain in it.

The Town Hall, standing W. of Government House, was built by the inhabitants of Calcutta in 1804, and cost £70,000. The style is Doric, with a fine flight of steps leading to a portico on the S.

The carriage entrance is to the N. under a portico. The centre of the building is occupied by a fine hall 162 ft. long and 65 ft. broad. In the S. front is a central room, 82 ft. long by 30 ft. broad, and two smaller rooms. In the S. vestibule is a marble statue of Warren Hastings, by R. Westmacott, R.A., standing between a Muhammadan kazi and a Hindu pandit. At the W. end of the lower saloon is a marble statue by J. Bacon, jun., of the Marquis Cornwallis, who is thus represented in all the three Presidential capitals of India. This statue was erected by the British inhabitants of Bengal, 1803 A.D. In the hall is a statue of Maharaja Ramanath Tagore. In the vestibules are busts of the Duke of Wellington, Sir Proby Cautley, Sir Henry Prinsep, Sir Henry Cotton, and several others; and portraits of Warren Hastings, Lord Lake, Lord Gough, Lord Minto, Lord Elgin, Sir C. Metcalfe, Sir H. Durand, Dwarkanath Tagore, Bishop Johnson, Mr Wilberforce Bird, Sir Henry Norman, Dr Duff, Bishop Wilson, Sir William Grey, Sir Rivers Thompson, Sir Henry Harrison, Sir Charles Allen, and Babu Keshab Chandra Sen; also of Lady Dufferin, Lady Lansdowne, and Lady Minto. There are also full-length portraits of Queen Victoria and Prince Albert, presented by Her Majesty to the city of Calcutta.

Government House is situated in a fine enclosure of 6 acres, standing back from the Maidan, which is here dignified by the Jubilee statue of the Queen-Empress Victoria, unveiled in 1902; near it are the statues of Lord Lawrence, Lord Canning, and Lord Hardinge. The Queen's statue, the work of Mr Frampton, will ultimately be transferred to the Queen-Empress Memorial Hall; and the statue of King Edward VII., entrusted to Mr

Mackennal, will probably be placed here.

Government House was begun under the Marquis Wellesley (the architect being Captain Wyatt), and finished in 1803, the design being copied to a limited extent from that of Kedleston Hall, Derbyshire, built by Adam. In the breakfast-room at the head of the fine staircase is a well-executed white marble statue of the Marquis Wellesley, with portraits of the same Governor-General, and of the Earl of Ellenborough. The *Dining-room* is of white chunam, with a floor of veined white marble. On either side are six well-executed marble busts of the Cæsars, taken from a French ship at the end of the 18th century. The *Throne-room* is so called from its containing the Throne of Tipu Sultan. East of this is the Council Room, where the meetings of the Bengal Legislative Council are now held. There were a number of fine pictures, mostly of the past Governors-General; the well-known historical pictures known as the Mysore Collection; and some land- and sea-scapes. Most of these have been removed from Government House, Calcutta, and are intended for the new Government House at Delhi.

Above the dining-room and the adjoining rooms is a splendid ball-room. The floor is of polished teak, and the ceilings are beautifully panelled, after designs by Mr H. H. Locke. The chandeliers and the portrait of Louis XV. are said to have been captured from the French at Chandernagore in 1757.

On the N. side of Government House is a fine brass 32-pounder, taken at Aliwal, and inscribed in Gurmukhi. On either side is a 6-pounder brass tiger-gun, taken from Tipu Sultan. There are also two large brass guns inscribed "Miani, 17th February" and "Hyderabad, 30th of March 1843"; and another with a car-

riage representing a dragon, which is a trophy of the peace of Pekin, 1842.

On the Esplanade, E., is the enormous and magnificent edifice, consisting of hundreds of residential suites of rooms, with all modern conveniences, known as the Esplanade Mansions, which almost overshadow Government House: next to it are the Locke Buildings (Walter Locke & Co.), and the new premises of Messrs Thacker, Spink & Co. Almost all the buildings on this side have been reconstructed, and the appearance is very pleasing.

At the N. angle of Dharmtolla Road is a large mosque erected during the Government of Lord Auckland, by Prince Ghulam Muhammad,¹ son of Tipu Sultan (killed 1799), in gratitude to God, and in commemoration of the Honourable Court of Directors granting him the arrears of his stipend in 1840; and in the N. side of the Maidan are the Curzon Gardens, nicely laid out on the site of what was an insanitary tank, with the tramway terminus and a picturesque shelter shed on the E., and with the *Ochterlony* Monument on the S. side of it. This is a column 165 ft. high, raised in 1823 in honour of Sir David Ochterlony, who brought the Nepal war (1814-16) to a successful conclusion, and was afterwards Resident in Malwa and Rajputana. From the galleries a fine view over Calcutta is obtained.

At the head of Chowringhi Road are the handsome premises of Messrs Whiteaway, Laidlaw & Co. — one of the finest in the city.

Beyond the Royal Theatre and the Continental and Grand Hotels in Chowringhi Road is the Indian Museum. In front of the former on the Maidan are the Monohar Das Tank and the statue of Lord Mayo, while to the E. of them lie the newly-constructed municipal

offices, worthy of the city and containing a fine Council Chamber fashioned after the Chamber of Deputies in Paris, and the Sir Stuart Hogg Market, which, with the recent extensions, is now the finest in the East; the Empire Theatre, built on up-to-date lines, the Elphinstone Picture Palace, the Hindustan Insurance Buildings which house the finely-equipped Calcutta Fire Brigade; and beyond them, on Wellesley Road (which with Wellington College, and Cornwallis Roads form the second great thoroughfare from S. to N.) stands the Muhammadan College, known as the Calcutta Madrasa.

The Indian Museum, 27 Chowringhi Road, is an immense building which, with the addition of the new wing, has a frontage of 312 ft. + 240 ft. = 552 ft. The building actually occupied by the Museum, together with the laboratories and the libraries, are:—

- (1) The main quadrangle facing the Chowringhi Road.
- (2) The new wing in continuation of its front.
- (3) The Sudder Street block, connected with the main building by two bridges.
- (4) The East Block of three floors at right angles to the Sudder Street block, and
- (5) The Central Residential Bungalow, built in 1790, which subsequently became the seat of the Sudder Dewani Court, and so gave its name to Sudder Street.

The entrance is from Chowringhi Road by a pillared vestibule, in which the most conspicuous objects are the stone figures of a lion and a bull that once stood on the capitals of edict pillars erected by Asoka in Northern Bihar. These are among the oldest sculptures in the Museum. The ground floor of the quadrangle has a colonnade in Italian style

¹ This gentleman died in 1878.

and surrounds an open turfed space. The N. side of the colonnade is occupied by *Geological Galleries* (the Mineral and Meteorite Galleries), the E. side by a *Zoological Gallery* (the Invertebrate Gallery) and the S. side by *Archaeological Galleries* (the Gupta, Asoka, and Inscription Galleries). Another Archaeological Gallery (that of the *Bharhut Stupa*)¹ opens direct from the vestibule on the S. side, as does also a Geological Gallery (that of the *Sivalik Fossils*) on the N. The Bharhut Stupa Gallery leads to the *Indo-Scythian Gallery*, which has another extensive gallery on its S., devoted also to archaeology, and is surrounded by a hanging balcony, from which at the S. end a few steps lead to a strong room in which the *Collection of Coins* is kept. The N.E. corner room in the ground floor of the main building is the *Insect Gallery*, which leads by a bridge to the first storey of the Sudder Street Block, in which is the *Ethnographical Gallery*. In the centre of the landing on the first floor of the Main Building stands a marble statue of Empress Victoria. Behind the statue is the entrance to the *Library of the Zoological Survey of India*, containing a collection of about 15,000 volumes, which is increasing lately at the rate of over 600 volumes a year. N. and S. from the library extend galleries in which *Zoological Collections* are stored for purposes of research. On the N. side is a gallery containing *Fossils*; in the N.E. corner room is the *Small-Mammal Gallery* from which a bridge extends to the *Industrial Gallery* in the second storey of the Sudder Street Block. The *Large Mammal Gallery* occupies the E. side; while the S. end contains the *Bird and Reptile* and the *Fish Galleries*. The first floor of the new wing is allotted to the *Art*

Section, and may be entered from the Fish Gallery. This is the *Artware Court*, where art collections are shown in three main classes—(1) textiles, (2) metal, wood, ceramic, etc., and (3) pictures.

The second floor extends along the whole length of the W. side of the Main Building and the new wing. There is a large public lecture-hall on this floor, the rest of which is devoted to the laboratories of the Zoological and Anthropological Section, the offices of the different departments, and a large gallery in this, at the S. end, is in the occupation of the Art Section.

The Sudder Street block, besides containing the Ethnographical gallery on the first storey and Industrial Gallery on the second, houses a library, herbarium, laboratory and offices of the Industrial and Botanical Sections.

The E. block of three floors houses the offices, laboratories and the library of the Geological Survey of India, the exhibits of the Section being shown in the four galleries, the Sivalik, the Meteorite, the Mineral and the Fossil Galleries in the Main Buildings. There are now in the Museum about 12,000 specimens of minerals, over 26,000 of rocks, 10,000 of microscope slides, and over 112,000 of fossils. Complete Catalogues of the various Sections are obtainable.

The Bharhut sculptures are among the most interesting in all India; a number of them are inscribed with the name of the Jataka or Sacred Story which they represent.

The most interesting objects are some carved rails from Bharhut and Buddh Gaya; but among the objects from Muttra may be noticed a figure of Buddha, 6 ft. high, with a halo behind the head, carved with floral devices, and in the Gandhara Collection a portion of a frieze representing six naked

¹ See Fergusson's *Ind. Arch.*, i. 104-110.

boys, quite classic in design, and a domestic scene, suggesting the Stable at Bethlehem.

The archæologist will find here selected pieces from the most famous ancient buildings in India. There are interesting fragments of Buddhist art from the caves of Orissa, from Sanchi and Buddh Gaya, from Muttra and Sarnath, near Benares; the collection of Græco - Buddhist and Indo-Scythian sculptures is very fine. In the separate Asoka Gallery are casts of all the rock edicts of that King.

Amongst the Siwalik Fossil Remains may be observed the Hyænarctos or Hyæna-Bear; the Amphicyon, a dog-like animal as large as the Polar bear; the Machairodus or Sabre-tooth tiger, whose canine teeth were 7 in. long; also the Siwalik cat, which was at least as large as a tiger. There is the skeleton of an elephant 11 ft. high. Amongst Siwalik birds there are the shank-bone and the breast-bone of a wading-bird as big as an ostrich. This bird has been called the Megaloscelornis, and these bones are the only ones belonging to this species existing in the world. In the Upper Palæontological Gallery there are many bones of the Dinornis. Amongst the reptiles a crocodile, from Matla, 18 ft. long, and a snake of the Python species, of the same length, are to be noticed. The remains of the Crocodilus crassidens are those of an extinct species of enormous dimensions. There is also a specimen of the Siwalik Colossochelys, a gigantic tortoise of prodigious size. It will be noticed that whereas all the species and many of the genera of the Siwalik Mammals and Birds are entirely different from those inhabiting the earth, all the genera of the Reptiles have living representatives in India. The Collection of the Fossil Vertebrata of the Siwaliks is the most complete and comprehensive in the world.

As to Minerals, it may be said that most of the diamonds exhibited are Indian—from Bundelkhand, S. India, and Sambalpur. There are also models of the most celebrated diamonds, such as the Regent, the most perfect brilliant in existence, the Koh-i-Nur, the Great Nizam, etc., all of which were obtained in India. Amongst the Meteorites may be remarked the model, No. 16, of one which fell on the 23rd of January 1870, at Nedagolla, in the Madras Presidency. The original weighed over 10 lb.

The adjoining **Economic Museum** contains fine samples of the products of the native manufactures of the country. It occupies a quadrangular building, in which the Calcutta International Exhibition of 1883-84 was held. The two museums are visited by over half a million of persons annually. Next to the Indian Museum on the S. side is the Bengal School of Art, an Institution similar to that of Bombay, with over 300 pupils.

At the corner of Chowringhi and Kyd Street is the United Service Club House, founded in 1845, and just beyond it, at the corner of Park Street, is the Bengal Asiatic Society. This institution was established in 1784 by Sir William Jones, and led to the foundation of the Royal Asiatic Society in London by Mr H. T. Colebrooke. Visitors can be elected members. The *Asiatic Researches* began to be issued in 1788, and continued to be published until 1839. The *Journal* began in 1832, under the auspices of Professor H. H. Wilson and Mr James Prinsep, who first deciphered the famous rock and pillar inscriptions of King Asoka, and from that time to 1839 both publications were issued. The library contains over 15,000 volumes, and there is a large collection of valuable MS., coins, copper plates, pictures, and busts. The pictures include one

of Warren Hastings, and one of Sir William Jones as a boy, by Sir Joshua Reynolds.

Farther down Park Street, Eastwards, on the right, is St Xavier's College, with a fine science laboratory and astronomical observatory. In the S. Park Street Cemetery is buried Landor's Rose Aylmer (died 1800); the grave is marked by a column spirally fluted. Here also lies Lucia, the wife of Robert Palk, idylled by Mr Rudyard Kipling, Sir John Clavering, Colonel Monson, Sir William Jones, and Augustus Cleveland (p. 419). In N. Park Street Cemetery, opposite, is the grave of W. M. Thackeray's father, who died 1815.

In front of the W. end of Park Street is the fine equestrian statue of Sir James Outram, and farther on, facing the E. approaches to Fort William, that of Lord Dufferin, N. of which, on the Red Road, are the statues of Lord Roberts, Lord Kitchener, Lord Ripon, Lord Minto, and Lord Lansdowne.

Chowringhi Road runs S. from Park Street, past the sumptuous edifice of the newly-constructed Bengal Club (founded 1827, and occupying the site on which Lord Macaulay once lived) and the residential quarter *par excellence* of Calcutta society, to the Cathedral of St Paul's. Half way is the superb pile of buildings of the Army and Navy Stores. Further S. is King Edward's Court, a fine pile of buildings, containing numerous elegant flats, with all modern conveniences, constructed by the Real Property Co. Off Middleton Street are **St Thomas's Roman Catholic Church**, a handsome building commenced in 1841, and the Convent of Our Lady of Loretto.

St Paul's Cathedral was designed by Major W. N. Forbes in 1819, commenced in 1839, and opened in 1847; it is 240 ft. long and 80

ft. broad, and the spire is 200 ft. high. The style is Hindu-Gothic, or spurious Gothic modified to suit the climate of India. In the vestry of the Cathedral is a large folio MS. volume entitled "History of the Erection of St Paul's Cathedral," which contains a plan of the Cathedral at p. 265. Over the porch is a library, left to the public by Bishop Wilson, and here is an excellent bust of that Bishop. The west window, designed by Sir E. Burne Jones, is a memorial to Lord Mayo. The original East window was given by the Dean and Chapter of Windsor, to whom it was presented as a gift by George III. for St George's Chapel. Beneath it are mosaics. The Communion Plate was given by Queen Victoria. The building cost £50,000, of which the Bishop gave £20,000, half of which, however, went to endowment.

On the left side of the vestibule is a black marble tablet to sixteen officers of the Bengal Engineers, who fell during the Indian Mutiny in the years 1857-58. It is ornamented with sixteen bronze medallions and a relief representing the gallant blowing up of the Kashmir Gate, Delhi, by Lieutenants Salkeld and Home (p. 258). Next are a tablet to fifteen officers who fell in the Bhutan campaign and an elaborate monument in memory of John Paxton Norman, of the Inner Temple, officiating Chief Justice of Bengal, who was assassinated on the steps of the Town Hall when entering the High Court (then located there) on 20th September 1871. Beyond is the tablet to seven officers of the 68th Regiment N.I., "who died during the Mutiny of the Native Troops, and subsequent operations, from 1857 to 1859, some on the field of battle, some by the hands of their own followers, others from disease—all doing their duty."

Then follows a tablet to Mr William Ritchie, of the Calcutta Bar and Inner Temple, who died

in 1862, a member of the Council of the Governor-General, the inscription by W. M. Thackeray, who was a cousin of Mr Ritchie's. On the left is a tablet to Sir H. M. Lawrence, adorned with a medallion portrait in white marble. In the centre of the left wall of the passage from the vestibule to the transepts and body of the Cathedral is a monument to Lord Elgin, who died at Dharmasala in 1863.

There is also in the centre of the transept a good statue of Bishop Heber, the second Bishop of the Diocese, by Chantrey.

The upper part of the steeple fell during the great earthquake of 12th June 1897, but has been restored. Among the latest memorials is one of Sir John Woodburn, Lieutenant-Governor of Bengal (1898-1902), and another erected by Lord Curzon to the members of Lumsden's Horse who fell in the S. African War. The organ is one of the finest ever made by Messrs Willis.

The main road, running S. and E., to the E. of the Cathedral, leads past the suburb of Ballygunge, with the residences of many Europeans. On the left of the road is the Alexandra Court—a pile of buildings containing several suites of rooms with all English conveniences, constructed by the Real Property Company—and farther on the London Missionary Society's Institution; and on the Lower Circular Road, running to the E. of Chowringhi, and leading to Ballygunge, are the Bishop's College and the Martinière Schools. Considerably to the N., is St James' Church, which can contain a congregation of 700. In the cemetery in the Lower Circular Road are buried Sir Wm. Macnaghten, murdered in Kabul, James Wilson, the financier; Justice Norman; and Sir John Woodburn.

Kalighat, celebrated as the site of a temple in honour of the goddess Kali, the wife of Siva, lies

about 1½ m. S. of the Cathedral, on the bank of Tolly's Nulla, an old bed of the Ganges. The place, after which the present capital of India is named, derives sanctity from the legend that when the corpse of Siva's wife was cut in pieces by order of the gods, and chopped up by the disc (*sudarsan chakra*) of Vishnu, one of her fingers fell on this spot. The temple is supposed to have been built about three centuries ago. A member of the Sābarna Chaudhury family, who at one time owned considerable estates in this part of the country, cleared the jungle, built the temple, and allotted 94 acres of land for its maintenance. A man of the name of Chandibar was the first priest appointed to manage the affairs of the temple. His descendants have now taken the title of Haldar, and are at present the proprietors of the building. The principal religious festival of the year is on the second day of the Durgapuja, in October, when the temple is visited by crowds of pilgrims.

W. of the Cathedral, on the edge of the Maidan, the Presidency Jail used to stand near the site of which the All India Memorial Hall of the Queen-Empress Victoria, originated by Lord Curzon, is being erected; the subscriptions for the memorial amounted to about sixty lakhs of rupees. It has been designed by Sir Wm. Emerson in the style of the Italian Renaissance, and consists of a magnificent building standing on a terrace 6 ft. to 7 ft. high and surmounted by a dome rising 160 ft. above the Maidan. The construction has been entrusted to Messrs Martin & Co., under the supervision of Mr V. J. Esch, Superintending Architect. The whole structure will be cased with white marble. Under the dome will be the Central Memorial Hall, built entirely of Indian marble; other principal apartments will be the Darbar and Princes' Halls. The

foundations were begun in 1905, and the foundation-stone was laid by King George V., then Prince of Wales, on 4th January 1906. Considerable progress has been made under the fostering care and monthly visits of Lord Carmichael, and much of the difficulties about obtaining sufficient quantities of marble from the Merkárá Quarries in Rajputana has been overcome: the walls of the first storey and part of the second are nearly complete, 40 ft. to 50 ft. high, in some portions higher still; and the dome is rising. It is hoped the hall may be completed in 1920. Lord Curzon has undertaken to collect objects of historical interest in England. His late Majesty King Edward VII. contributed a large collection of the relics of his august mother and paintings depicting important Court functions. His Majesty King George V. has liberally contributed a complete set of valuable engravings depicting Her late Majesty's life from childhood to advanced age; and the Indian Princes and Nobles have contributed a large assortment of historical objects. The Government of India and Provincial Governments have added most valuable holographs and documents, and the City of Calcutta has transferred many of its statues and busts of Indian officers of renown. The trustees have been adding relics and pictures illustrating the august reign. Queen Alexandra has sent two busts, one of His late Majesty and one of herself. Her Majesty Queen Mary has contributed a large collection of Indian prints depicting the stirring events of the evolution of the Empire and the world-famed ancient architecture of Hindustan. The collection has been temporarily located in historical Belvedere, the residence of the former Lieutenant-Governors of Bengal, kindly placed at the disposal of the trustees by

His Excellency Lord Carmichael. On the farther side of the Lower Circular Road are the General and Military Hospitals; and beyond them and opposite the Racecourse the 'Alipur Road, crossing Tolly's Nulla, leads to the Zoological Gardens and Belvedere, and the Agri-Horticultural Gardens. The Zoological Gardens were inaugurated in 1875-6, and comprise an area of 36 acres well laid out, and a fair show of animals in houses presented by various Ruling Chiefs and wealthy persons. The tigers, leopards, crocodiles, and snakes are usually the finest. On the S. side of the gardens is the 'Alipur Observatory.

Belvedere House stands in extensive and well-kept grounds. His Excellency the Governor having given it up as his residence, the Victoria Memorial exhibits have for a time been housed in it. At a spot W. of the entrance of Belvedere, on the 'Alipur Road, was fought, on 17th August 1780, the duel between Warren Hastings and Sir Philip Francis, in which the latter was wounded. S. of Belvedere are the Agri-Horticultural Gardens, commenced here in 1872, and managed by that Society, which was founded in 1820; and still farther S., off Judge's Court Road, once stood Hastings' private residence, for some years known as "Hastings House," and later as the State Guest House inaugurated by Lord Curzon. It is now a residential school for the better classes of Indian boys.

In 'Alipur a large number of fine residential houses have been built, and it is now the finest suburb of Calcutta, cool, clean and shady.

The Racecourse, which is 2 m. long, is one of the most famous in India, and the Christmas race meeting, in which the King-Emperor's Cup and the Viceroy's

Cup are run for, is one of the principal society events of the winter season in Calcutta. The bridge S.W. of it, across Tolly's Nulla, leads to Kidderpore, so called after Colonel Kyd, who constructed the Government Dockyard, near which the Port Trust has excavated magnificent new docks. Between 1781 and 1821 ships were built at the Kidderpore Docks at a cost of more than £2,000,000, and in 1818 the *Hastings*, a 74-gun ship, was launched there. The new wet docks enclose an area of 10 and 30 acres respectively, in addition to which there are two dry docks; the sum spent over this improvement has exceeded two and a half crores of rupees. In Kidderpore is St Stephen's Church.

The last bridge near the river, named Hastings Bridge, leads past the Government Dockyard, the docks, and the P. & O. premises, to Garden Reach, once known for its palatial suburban residences, and of late years as the home of the last of the Kings of Oudh, Wajid Ali, who was deposed in 1854, and survived his deposition by more than thirty years. It was considered necessary to place him inside Fort William during the summer of 1857.

This is the shortest route for visiting the Botanical Gardens (p. 93), on the right side of the river; but, unless the boat used in crossing is detained at the other side, there may be some difficulty in regaining the left bank.

At the W. extremity of Garden Reach, or in its vicinity, was situated the small fort of 'Aligarh, and opposite to it, on the other bank of the river, was the fort of Tanna, both of which were taken by Clive in the recapture of Calcutta in 1756-7.

Turning N. from the Hastings Bridge, St George's Gate of Fort William (S.W. corner) is reached in half a mile. On the way is passed Cooly Bazar, near the site

of which Nuncomar was hung for the offence of forgery on 5th August 1775. In front of the gate is a statue of Lord Napier of Magdala, opposite Prinsep's Ghat. This, now some distance inland since the reclamation of the foreshore and the excavation of the new docks, is marked by a pavilion of stone, supported by pillars, and inscribed "James Prinsep," in memory of the great Oriental scholar, who died in 1840 from over-devotion to the pursuits in which he so greatly excelled. Farther N., and opposite the Water Gate of the Fort, is the Gwalior Monument, erected by Lord Ellenborough in 1844, in memory of the officers and men who fell in the Gwalior campaign of 1843, and designed by Colonel W. H. Goodwyn, Beng. Eng. It is of brick faced with Jaipur marble, surmounted by a metal cupola made from guns taken from the enemy. In the centre the names of those who fell at the battles of Maharajpur and Panniar are engraved on a sarcophagus.

Fort William originally received its name from William III. The site was changed in 1757, after the battle of Plassey, from that now occupied by the Post-Office to the river bank farther S., where Clive commenced a new and much more formidable fortress, which was finished in 1773, at a cost of £2,000,000. It is an irregular octagon, enclosing an area of 2 sq. m., of which five sides look landward and three on the river, and is surrounded by a fosse 30 ft. deep and 50 ft. broad, which can be filled from the river. The garrison consists of two regiments, one British and one N.I., and one company R.G.A. There are six gates—Chowringhi, Plassey, Calcutta, Water Gate, St. George's and Treasury Gate. There is also a sally port between Water and St. George's Gates. A wireless installation has been put up out-

side the Water Gate. Inside the Chowringhi Gate, past the Governor's residence, now used as a Soldiers' Institute and Garrison School, is the Fort Church of St Peter, built in 1828. The Catholic Chapel, St Patrick's, was built in 1857. The *Military Prison* behind this is built on a massive storehouse, on which is an inscription relating to the amount of rice and grain deposited there by the authorities in 1782. Over the Treasury Gate are the quarters of the Commander-in-Chief in India while at Calcutta; the offices of the Army Headquarters now remain all the year round at Simla. The *Arsenal* is worth a visit, for which permission must be obtained from the officer commanding the Fort. The submarine Mining depôt is also accommodated in the Fort; it cannot be visited.

(2) Quarters North of the Maidan and Government House.

To the W. and E. of Government House lie the magnificent offices now vacated by the Government of India and partly used by the Government of Bengal offices, N. of Government House, Old Court House Street on the E., Wellesley Place in the centre, with sumptuous quarters for H.E. the Governor's staff, and Council House Street on the W., lead to **Dalhousie Square**,¹ with a fine garden and tank in the middle of it, the second approaching the square opposite the **Dalhousie Institute**. This was built "to contain within its walls statues and busts of great men." The foundation-stone was laid in 1865, but the entrance portico preceded it, having been built in 1824. The hall is lined with marble, and measures 90 ft. by 45 ft. It contains a statue of the Marquis of

Hastings, by Flaxman, and also statues of the Marquis of Dalhousie and of the Rt. Hon. James Wilson and busts of Edward E. Venables, of Brig.-General Neill, C.B., and Sir Henry Havelock, by Noble; and of Sir James Outram and General John Nicholson, by Foley. Within the square are the statues of Sir Steuart Bayley, Sir A. Eden, Sir Andrew Fraser, Sir J. Woodburn, and the Maharaja of Darbhanga. On the E. side of the square is the Currency Office.

On the S.W. corner, at the junction of Council House Street and Hare Street is the magnificent pile of buildings constructed for the Commerce and Industry Department of the Government of India, now converted into a Commercial Museum. Facing it is the fine building of the Alliance Bank of Simla, and an imposing structure for the Hongkong and Shanghai Bank is being erected.

In the S.E. corner is the fine Telegraph Office, and on the W. side is the large domed building of the General Post-Office, occupying part of the site of the Old Fort. It cost Rs.630,510, and occupies an area of 103,100 sq. ft. The dome at the S.E. corner is over 220 ft. high. The Old Fort William lay between Bankshall Street, now Koila Ghat Street, on the S., and Fort Ghat Street, now Fairlie Place, on the N. Its W. side fronted the river. The W. and E. walls were 710 ft. long, the N. side measuring 340 ft. and the S. side 485 ft. After it was abandoned as a fort it was used as a Custom-house until the river moved away from the site. Part of the original arcades, which served as warehouses on the S.W. side of the interior, may still be seen inside the yard of the Post-Office, where they are used as a waggon-shed; and, where possible, the outlines of the Fort have been indicated on the ground. At the N.E. corner of the Post-Office is a tablet inside an arch, which indicates the actual

¹ This was formerly known as the Lal Bagh, and the tank is still known as the Lal (red) Dighi.

site of the Black Hole¹ of 1756, which, by the care of Lord Curzon, has been paved with black marble. The exact size of the hole was 22 ft. by 14 ft., and its height was probably 16 ft. to 18 ft.; and into it were forced on the night of 20th June 146 human beings, of whom twenty-three only survived the next morning. The old obelisk memorial of the tragedy, erected by the principal survivor, Mr J. Z. Holwell, was renovated in front of the Calcutta Collectorate, at the expense of Lord Curzon, in 1902; the inscription originally borne by it has been modified in the restoration. Mr Holwell, who was on the Calcutta Council from 1768-72, and was most unjustly removed from the Service by the Directors of the E.I. Company, died in England at the age of eighty-seven in 1798.

From the N.W. corner of Government House, Hastings Street leads towards the river, past the old Cathedral Church of St John, in an enclosure shaded with trees. In the porch, is, now, the *Tomb of Lady Canning*, brought from Barrackpore. It consists of a base of white marble, with a sarcophagus, on which is inlaid a cross with flowers. Outside the Church, to the N. of the W. entrance, is a domed pavilion about 50 ft. high with twelve pillars. It is said to have been erected in commemoration of those who fell in the Rohilla War, but, strangely enough, is without inscription.

The church, which was begun in 1783 and opened in 1787, is 136 ft. long and 70 ft. wide.

¹ The so-called Black Hole was merely a lock-up for drunken or disorderly soldiers of the garrison of the Fort, and was simply a portion of a sleeping barrack in the S.E. corner of the Fort, enclosed from the rest of the building. The barrack was situated just to the N. of the S.E. bastion, and the Black Hole was therefore between the bastion and the barrack. Views of the Old Fort and of Holwell's monument are among Daniell's drawings of Calcutta.

The W. vestibule has on the left a large picture of the Last Supper, painted and presented to the church by John Zoffany, 1733-1810, in which the Apostles are all portraits of certain well-known inhabitants of Calcutta. In the E. end of the nave is the grave of Bishop Middleton, first Bishop of Calcutta (died 1822), and among the memorials are those of Colonel Kirkpatrick, Resident at Hyderabad at the end of the 18th century, Mr Alexander Colvin, Dr. James Ward, and others.

In the N.W. corner of the grave yard is the large octagonal mausoleum of Job Charnock, the founder of Calcutta, 24th August 1690, who died in January 1692. In this is also now a tablet to Surgeon William Hamilton, who in 1716, having cured the Emperor Farukhsiyar, obtained for the E.I. Company the right of importing their goods free of duty, and other great privileges.

A few yards to the S. is the tomb of Admiral Charles Watson, who, with Clive, retook Calcutta (died 16th August 1757). It has a large square base, supporting an obelisk, inscribed to his memory.

On the N. side of Dalhousie Square are the buildings of the Bengal Secretariat, on the site of the Old Writers' Buildings, where so many illustrious Indian statesmen commenced their career. Opposite these are the statues of the Lieutenant-Governors Eden, Woodburn, and Bayley. The buildings all round Dalhousie Square are imposing edifices worthy of the Second City in the Empire.

E. of Writers' Buildings is the Scotch Kirk, *St Andrew's*, situated in Radha Bazar, and called by the natives *Lal Ginja*, or Red Church. It cost £20,000, was opened in 1818, and seats 500 persons. In the vestry there is a portrait of Dr James Bryce, the first minister, by Sir John Watson Gordon, and there are some handsome monuments within the church. It sends

a representative to the General Assembly at Edinburgh. Directly E. of the Kirk is the Lal Bazar and its continuation, the Bow Bazar Street, leading to the Sealdah railway station of the Eastern Bengal State Railway. Several fine buildings have been erected on this street, which is almost exclusively occupied by cabinet-makers.

New handsome Police Offices have been built and are still under construction, the Lal Bazar Police Court having been removed from its old site—that for the S. of the town being located in Bankshall Street, in what used to be the office of the Board of Revenue, and that for the N. of the town in the old Free Church Institution (Duff College) in Nintollah Street.

A little to the E. of the square, in Mission Row, is the *Old Mission Church*, called the *Purana Girja*, or *Old Church*, in the vernacular. It is 125 ft. long from E. to W., and 81 ft. 10 in. broad, and seats 450 persons. It was built by the celebrated missionary, Johann Zachariah Kiernander, who was born at Azted, in Gothland, Sweden, in 1711, and educated at the Universities of Upsala and Halle. Being offered a post as missionary, he left England in 1758, and opened a school in Calcutta. His second wife on her death left valuable jewels, with which he founded a school. He called his church Beth Tephilla, "House of Prayer." When blind he was deceived into signing a bond which ruined him, and the church was seized by his creditors, but redeemed by Mr Charles Grant for Rs.10,000. Mr Kiernander then went to Chinsura, and died in poverty at Calcutta in 1799. There is a window in the church presented by his grandson, and there is a good engraving of him in the Mission Room, with an inscription in German. There are many interesting tablets in the church, particularly one to Mr Charles Grant and one to the Rev.

Henry Martyn (1781-1812), also to Bishop Dealtry of Madras (1796-1861), to Bishop Daniel Wilson (1778-1858), and to an Arab lady of distinction who was converted to Christianity.

The steeple was so seriously injured by the great earthquake of 12th June 1897 that it was necessary to rebuild it.

From the S.W. corner of Dalhousie Square, Hare Street leads also towards the river, and passes the Small Cause Courts, to the Metcalfe Hall, founded in honour of Sir Charles Metcalfe by public subscription, and built 1840-44. The design is copied from the portico of the Temple of the Winds at Athens. The building, which formerly contained a neglected Public Library, was in 1903 converted into an effective Imperial Library of Reference at the instance of Lord Curzon. Tickets of admission to the reading-room are freely granted to strangers. On the river front, to the N. of this, are the Sailors' Home and the fine offices of the Port Trust. To the S. is the Bank of Bengal, recently extended.

N. of Dalhousie Square and S. of Harrison Road (a new broad thoroughfare leading from the Hooghly Bridge to the Sealdah station of the Eastern Bengal Railway) is what is known as the commercial quarter, and of late several palatial buildings have been constructed in Clive Street by large business firms. The principal of these are the Graham Buildings, Gillander House, the Chartered Bank, the Allahabad Bank, Messrs Martin & Company's buildings, the Oriental Life Assurance Buildings, and the South British Insurance Buildings. The Royal Exchange Building, an imposing structure, is being constructed for the Bengal Chamber of Commerce, to the N. of the Chartered Bank Buildings. In this vicinity, also, are the Synagogue, the Armenian Church, and

the Roman Catholic Cathedral, and in the same neighbourhood are a Greek Church, built in 1780, and a Parsi place of worship, while N. of Harrison Road are the Mint and Mayo Native Hospital. When the first Portuguese came to Calcutta, the English granted them a piece of land in Portuguese Church Street, on which the friars of the order of St Augustine erected a chapel in 1700. Its successor, the Roman Catholic Cathedral, was built in 1797, and is dedicated to the Virgin Mary of the Rosary.

The railway stations at Howrah and Sealdah have been greatly improved, especially the former, which now takes rank with the Victoria Terminus of Bombay, and is arranged with special regard to the convenience of passengers. Sealdah has now ten platforms, with separate booking-offices, at right angles to the lines, in what are known as the N. Station (for suburban trains), Main Station (for through trains), and S. Station (for S. Section trains).

The Mint, at the W. end of Nimtollah Street, was built 1824-30, the architect being Major W. N. Forbes. The style is Doric, the central portico being copied from the Parthenon at Athens. The area of the building and grounds is 18½ acres. The Mint Master issues passes on application to view the Mint.

From the N.E. corner of Dalhousie Square, Bow Bazar, one of the principal trading centres of the city, also leads to the Sealdah station, with the railway station for Mutla, or Port Canning, and for Diamond Harbour, and the Campbell Hospital lying to the S. of it. Half-way down it College Street leads to the N., past the Eden, Ezra, and Medical College Hospitals, and the Medical College to College Square, also with a fine tank in the middle of it.

The Ezra Hospital is for Jews only. The Medical College Hospital, with accommodation for over 300 patients, was erected in 1853, and the Eden Hospital for women and children in 1882. Other extensions have since been made, including a Surgical Ward, an Eye Infirmary, the Prince of Wales' Hospital, the Electrical Annexe—and the whole now provides adequately for the medical relief of the Indian population. The nursing here and in some of the other hospitals, is under the Sisters of St John, at Clewer. Behind the Hospital is the College, with 500 students, one of the principal institutions of the kind in India. It is intended that the principal memorial of King Edward VII. shall take the form of an endowment fund for medical research, relief, and education.

The Dufferin Zenana Hospital lies considerably to the E., in Upper Circular Road. On the W. side of College Square are the Calcutta University, the Hare School, and the Presidency College. The University Senate House is a grand hall, 120 ft. by 60 ft., in which the Convocations for conferring degrees take place. It has a portico supported by six lofty pillars. Large structures have been raised in the neighbourhood for the University Law College, the College of Science, and spacious lecture halls. Close by is the Hare School, which is self-supporting. It was erected out of the surplus fees of students. The Presidency College was developed in 1855 from the Hindu College, founded in 1824, and opened in 1827, at a cost of Rs.170,000. The foundation-stone of the new building of this College was laid in 1872 by Sir George Campbell.

Farther N., in Cornwallis Square, are those of the *Free Church of Scotland Mission*, begun by Alexander Duff in 1830. The Scottish Church is in Wellesley Square. E. of Cornwallis Square

and N. of the end of Beadon Street (abutting on Circular Road, which in its upper portion marks the line of the Mahratta ditch, hastily dug in 1742, when these marauders invaded Orissa and Bihar) is Halsi Bagan Road, so called from the gardens of the well-known Omichand (Amin Chand) died 1758, who was tricked by Colonel Clive, in a lane off which are the marble Jain temples in the garden known by the name of Badri Das. The temples, dedicated to the 10th Tirthankar, Sitalnath Ji, and the gardens form one of the prettiest spots in the whole of Calcutta, and should be visited by all who have a spare half-hour to give to them.

There is also a Chinese temple in Calcutta.

Missions of the Church of England.—The *Oxford Mission*, 42 Cornwallis Street, works chiefly among the high-caste Indians, and has charge of Bishop's College in Circular Road, a Boys' High School, and Industrial School, and two hostels for College Students.

The *S.P.G.* — Headquarters, Bishop's College, Lower Circular Road; Mission Church, St Saviour's, Wellesley Square, with a Boarding-school.

The *S.P.G. Ladies' Association* have charge of the Milman Memorial School for Girls.

The *Sisters of St John* (Clewley) have charge of the Government General Hospital, the Medical College Hospital, the Eden Hospital, and the Lady Canning Home for Nurses; also of native mission work at *Peepulpatti*, in the rice-fields 3 m. distant.

(3) The W. Bank of the Hooghly River.

The Royal Botanical Gardens, on the W. bank of the river, opposite Garden Reach, were founded in

1787, on the suggestion of Colonel Kyd, who was appointed the first Superintendent. He died in 1793, and has had a number of eminent successors, who have brought the gardens to a high standard of merit, among them Roxburgh, Buchanan - Hamilton, Wallich, Griffith, H. Falconer, Sir G. King, and Sir D. Prain—all well-known botanists. The visitor may drive to the gardens across the bridge and through Howrah, over the E.I. Railway by a bridge, or to Garden Reach, and cross the river Hooghly in a boat. There is also a steamer service from Chandpal Ghat to Sibpur Ghat and sometimes from the first direct to the Botanical Gardens. At Sibpur is the Engineering (Civil) College, with its classes of mining and other instruction. The area of the gardens is 270 acres, with river frontage of a mile.¹ At the N.W. corner is the Howrah Gate, where are three fine trees—a *Ficus indica* in the centre, with a *Ficus religiosa* on either side. From the College Gate, near the river, an avenue of almond-trees runs along the river front; while an avenue of Palmyra palms to the right of the entrance, and one of mahogany trees to the left, lead to the centre and the memorial of Colonel Kyd, passing the palm plantation, which is separated off by a canal crossed by pretty bridges. From the memorial an avenue of palms leads S. to the Landing-place Gate, on the river; and close by it are the three conservatories for orchids, large plants, and palms. Leaving the above avenue to the left, the Great Banyan Tree² (*Ficus indica*), which covers ground nearly 1000 ft. in circumference, and had in 1894 378 grounded aerial roots,

¹ An excellent little guide to the gardens, with a plan of them, can be bought in Calcutta and at the garden gates.

² The Banyan (which is the Indian Bar or Bor tree) derives its name from the fact that the Hindu traders (baniyas) used to worship under such trees at Gombroon Ormuz, in the Persian Gulf.

with many more in process of formation, will be reached, and will be found a wonderful sight.

"The fig-tree at this day to Indians known
In Malabar or Deccan, spreads her arms,
Branching so broad and long, that on the
ground
The bended twigs take root, and
daughters grow
About the mother tree, a pillar'd shade,
High over-arched and echoing walks
between."—MILTON, *Paradise Lost*.

On the left of an avenue near it is a monument to Roxburgh, with a Latin epitaph by Heber. Sir J. Hooker writes of these gardens in his *Himalayan Journals* that "they have contributed more useful and ornamental tropical plants to the public and private gardens of the world than any other establishment before or since." He says also, "that the great Indian Herbarium, chiefly formed by the staff of the Botanic Gardens, under the direction of Dr Wallich, and distributed in 1829 to the principal museums of Europe, was the most valuable contribution of the kind ever made to science"; and adds, "that the origin of the tea-culture in the Himalayas and Assam was almost entirely the work of the Superintendent of the gardens at Calcutta and Saharanpur." The Superintendent has a house in the gardens. Near it is the Herbarium, or collection of dried plants, probably the only one in Asia of the first class. There are from 30,000 to 40,000 species represented in it. Attached to the Herbarium is a very fine Botanic Library.

(4) Excursions in the Vicinity of Calcutta.

Barrackpore (population about 32,000) is called by the natives Chanak. "The theory that the name is derived from Charnock (the founder of Calcutta on 24th August 1690), who founded a small bazar here, is quite untenable, for Chanak is a common

Bengali appellation for a village, and appears as Tchanuk in an old Dutch map of India, drawn early in the 17th century, long before Job Charnock became a known man."¹ The journey may be made by rail (14 m.), carriage, or river, if the traveller can procure a steam launch, or can utilise the local river steamer services. The trip up the river takes three hours, and is interesting and picturesque. The river excursion may pleasantly be extended to Serampore, Chandernagore, Chinsura, and Hooghly (see p. 97).

Just before reaching Barrackpore there are some handsome modern temples on the left bank. Then comes the beautiful park (left bank), with noble trees, and a small pier as landing-place, at which the Viceroy's steam launch has often moored. At 300 yds. to the S. of the house, under a fine tamarind tree, is a polygonal enclosure, within which is a white marble monument to Lady Canning; it replaces that removed to the Cathedral at Calcutta. A Hall, built by the Earl of Minto in 1813, stands 100 yds. to the N. of the house, within a colonnade of Corinthian pillars. Over the outside entrance is a black slab, inscribed—

To the Memory of the Brave.

On the walls are four tablets, erected by different Governors-General to the memory of British soldiers who fell in Mauritius (Isle of France) and Java, 1810-11, and at Maharajpur and Panniar, 1843.

The House, which was the Viceroy's country residence, was commenced by Lord Minto, and enlarged to its present size by the Marquis of Hastings. It contains some interesting pictures of Native Princes. N. of the park is Barrackpore Cantonment. Troops were first stationed here in 1772, when

¹ *Calcutta, Old and New* (p. 993) by H. E. A. Cotton.

the place received its name. In 1824, during the First Burmese War, the 47th B.N.I. which was ordered on service, mutinied here on the 30th October, on which the Commander-in-Chief, Sir Edward Paget, proceeded (1st November) to the Cantonment with two European regiments, a battery of European artillery, and a troop of the Governor-General's Body-guard. The mutinous regiment was drawn up in face of these troops, and was ordered to march or ground arms. On the sepoys refusing to obey, the guns opened upon them, when, throwing away their arms and accoutrements, they made for the river. Some were shot down, some drowned, and many hanged, and the regiment was struck out of the "Army List." In March 1857 there were again mutiny troubles here, and these were checked for the moment by the personal bravery of General Hearsey,¹ commanding the troops. The 19th N.I. and 34th N.I. were disbanded in March and May. It became necessary to disarm all the native troops at the station on 14th June.

At Barrackpore there are a church (St Bartholomew's), a Zenana Mission, and a Wesleyan Church; and the Charnock Hotel (in the Station Road).

There is a Small-arm Factory at Ichapur, 3 m. to the N. of Barrackpore.

Cossipore, 5 m. from Calcutta. A municipal town. There is a Foundry and Shell Factory on the bank of the Hooghly.

Dum Dum station (population about 21,000), 7 m. from Calcutta. The "Clive Hotel" is at Clive House (referred to below). A municipal town and Cantonment.

It was the headquarters of the Bengal Artillery from 1783 till 1853, when they were removed to Meerut; and their mess-house is now the Soldiers' Club, and is known as the *Outram Institute*. A bust of Sir James Outram stands in the veranda.

In the centre of the Barrack Square is a huge gun. Near this is a monument to the officers and men killed in the Khyber whilst returning from Kabul in 1841-2. The treaty which restored the British settlements after the recapture of Calcutta in 1757 was signed at Dum Dum. Lord Clive had a house here, and Fairley Hall was occupied by Sir Henry Lawrence when a Lieutenant. There are an English Church (St Stephen's), a Roman Catholic Chapel, and a Wesleyan Chapel. There is an *Ammunition Factory*, which is guarded by British soldiers.

Howrah (population 179,006) is a large and flourishing city on the right bank of the Hooghly, opposite Calcutta, with over sixty mills, employing 50,000 hands, chiefly recruited from up-country. It is also at present the terminus of the E.I.R., and of the Bengal and Nagpur Railway. At the end of the 18th century it was a small village; now it stands thirteenth among all the cities of India.

The following places may be visited by the E.I. Railway:—

12 m. Serampore station (population 49,594), the head-quarters of the sub-division of the same name, is on the W. bank of the Hooghly, opposite Barrackpore. Serampore was formerly a Danish settlement, and was then called Fredericksnagore. The fine mansion of the Danish Governor now forms the Courts of Justice and administrative offices. In 1845 a treaty was made with the King of Denmark, by which all the Danish possessions in India—namely, Tranquebar, Fredericksnagore, and a small

¹ General Hearsey, who as a subaltern had taken part in the defence of Sitabaldi (p. 115), had previously shared in the suppression of a mutiny of Native Troops at Wazirabad in 1849.

piece of ground at Balasore—were transferred to the E.I. Company for £125,000. The treaty confirmed the privileges conferred on Serampore College by the Royal Charter of the Danish King. The chief claim of Serampore to notice arises from its having been from 1800 onwards the scene of the labours of Carey, Marshman, and Ward. The zeal and success of the Baptist missionaries of Serampore form one of the brightest episodes of evangelistic efforts in India. From its press proceeded forty translations of the Scriptures. Serampore is now the centre of a flourishing jute and cotton trade, there being three jute and two cotton mills in or near the town.

The old *Danish Church* (St Olave's, 1805) cost Rs.18,500, of which 1000 were given by the Marquis Wellesley; it is now Anglican. In it there are tablets in memory of the three Baptist missionaries above named. Their tombs are in the Baptist cemetery, on the right hand of the Grand Trunk road from the old railway station. There are also a Baptist Mission Chapel, a Roman Catholic Church, and a Baptist Zenana Mission.

At Mahesh, some 2 m. from Serampore, there is a large and ancient temple dedicated to Jagannath. The car festival in July is the largest of its kind in India outside Puri.

The *College*, founded in 1818 by the Serampore missionaries, possesses a handsome building on the banks of the river, and commands a fine view across it over Barrackpore Park. The College has Faculties in Arts and Theology, and confers its own Divinity degrees. On the ground floor are the lecture-rooms, and on the floor above, the Great Hall, which is 103 ft. long and 66 ft. broad. In the Hall are portraits of Frederick VI. of Denmark (who gave the College its Charter, empowering it

to grant degrees in all the sciences) and of his Queen; of Dr Marshman, by Zoffany, and of King Christian of Denmark and his Queen. The latter portrait, however, is disputed. Some hold that it represents Madame Grand, who afterwards married Talleyrand. Dr Busteed put forward the theory that it represents a Danish princess, but the local tradition is that it is a portrait of King Christian's Queen.

The Library, of over 12,000 volumes, contains many treasures, including the first editions of Carey and Marshman's forty translations of the Bible; some curious Sanskrit, Tibetan and Pali manuscripts and a Persian manuscript containing the lives of the Apostles, prepared by Jerome Xavier for Akbar or Jahangir. Father Hosten, S.J., who has examined the manuscript with much care, writes, "I do not know of any other complete specimen of the Lives of the Apostles than the copy of Serampore. Those in the Marsden Collection, Bodleian and National Library, Paris, are perhaps complete too." There are a number of other books of unique interest, bearing on Oriental learning. Adjoining the Library is a museum in which may be found Carey's crutches, three chairs that once belonged to the famous Trio, a number of Carey's autograph letters and the marriage agreement between William Ward and Mary Fountain.

In the College compound is the house in which Carey lived and died. In 1910 a large and handsome hostel, with quarters for a member of the staff, was erected behind the historic College building. The Serampore Weaving School was established in the year 1909 for the purpose of training Indian weavers in modern methods of weaving.

The fine mansion next to the chapel, which was the common centre of the Serampore brother-

hood, with all Carey's Park and botanic garden, is now the property of the India Jute Company. Here, from 1835 to 1875, the weekly *Friend of India* was edited, and also the *Samachar Darpan*, the first vernacular newspaper in Bengal.

21 m. Chandernagore¹ station. Area, 3 sq. m.; population, 29,293. The French settled here in 1673, and under Dupleix (1697-1764), of whom the place has a statue, over 2000 houses were built, and a considerable trade arose during his superintendentship (1730-1741). In 1757 the town was bombarded by the British Fleet, under Admiral Watson, and captured, and the fortifications were demolished; but in 1763 the town was restored to the French. In 1794 it was again captured by the British, and held till 1815, when it was again restored to the French. The railway station is just outside the French boundary. A church stands on the bank of the river, built by Italian missionaries in 1726. The hotels are the Hotel de France and the Thistle Hotel. At Chandernagore there was a first-class college (The "Dupleix College"), which is now reduced to a High English School. At Goswami Ghat, between Chandernagore and Chinsura, there still stands a huge ruined temple, known to the neighbourhood as the "Konē Bo-yēr Mandir." At present there is no image in the temple; but formerly it was the temple of the Goddess Kali. According to tradition, it was erected by one Devi Sarkar upon the wish of his brother's wife, who was the "Konē Boū," or the youngest bride, of the Sarkar family.

24 m. Hooghly station. At Hooghly, the E.I.R. and the Eastern Bengal Railway are linked across the great cantilever Jubilee

Bridge, which is 1213 ft. long, and ranks as one of the greatest engineering feats in India. The linking line, 3 m. long, joins the Eastern Bengal Railway at Naihati. Hooghly and Chinsura (2 m. from Hooghly station, see below), together cover an area of 6 sq. m. The total population is 28,916. Hooghly town is the administrative headquarters of the district of the same name. It was founded by the Portuguese in 1537 A.D., when the royal port of Bengal, *Satgaon*, began to be deserted owing to the silting-up of the *Saraswati*, on which river it was situated. They commenced by building a fortress at Golghat, close to the present Hooghly jail, some vestiges of which are still visible in the bed of the river. When Shah Jahan came to the throne complaints were made to him of the conduct of the Portuguese at Hooghly. The Emperor bore them a grudge, as they had refused to assist him against his father, and he sent a large force against the fort, which, after four and a half months' siege, in 1632, was stormed. More than 1000 Portuguese were slain, and 4000 men, women, and children were captured. Out of 300 Portuguese vessels only three escaped. The prisoners were sent to Agra, and forcibly converted to Islam. *Satgaon* was then abandoned for Hooghly, which was made the royal port. The Portuguese returned to Hooghly in 1633. It was also the first settlement of the English in Lower Bengal. The E.I. Company established a factory there in 1651, under a *farman* from Sultan Shuja', Governor of Bengal and second son of Shah Jahan. This *farman* was granted, according to tradition, to Dr Boughton, who had cured a favourite daughter of the Emperor, and asked for this reward. In 1669 the Company received permission to bring their ships to Hooghly to load, instead of trans-

¹ See p. 76.

porting their goods in small vessels, and then shipping them into large. In 1686 a dispute took place between the English at Hooghly and the Nawab of Bengal, and the Company sent a force to protect their Hooghly factories. It chanced that a few English soldiers were attacked by the Nawab's men in the bazars, and a street fight ensued. Colonel Nicholson on this bombarded the town, and 500 houses were burnt, including the Company's warehouses, containing goods to the value of £300,000. The chief of the English factory was obliged to fly to Sutanati¹ and take shelter with some native merchants. In 1742 Hooghly was sacked by the Mahrattas.

The principal sight at Hooghly is the Imambara, built by Karamat Ali (Superintendent 1837-1876), the friend and companion of Arthur Conolly, at a cost of Rs.300,000 from funds bequeathed by Muhammad Muhsin, who owned a quarter of the great Saiyadpur estate, in Jessore district, and died in 1814, without heirs, leaving a property worth £4500 a year for pious purposes. The trustees quarrelled, and Government assumed charge of the estate. During the litigation a fund of £86,110 had accumulated, and with this the Hooghly College was founded in 1836. The façade of the Imambara is 277 ft. by 36 ft.; and in its centre is a gateway flanked by two minarets, or towers, 114 ft. high. On either side of the door are inscriptions. Within is a quadrangle, 150 ft. by 80 ft., with rooms all round, and a fine hall paved with marble, having a pulpit with sides covered with plates of silver, and a verse of the Koran inscribed in each plate. The library was bequeathed by Karamat Ali, but a few books have since been added by other people. Among them are 787 MSS., including a fine folio Koran,

in two volumes, given by Prince Ghulam Muhammad, son of Tipu Sultan. On the opposite side of the road from this Imambara is the old Imambara, built in 1776-77. In the W. corner lie the remains of Karamat Ali, and there is a white marble tablet placed against the wall, with an extract from the Koran, but no tomb.

Chinsura, 1 m. S. of Hooghly, was held by the Dutch for 180 years, and ceded by them to the British in exchange for Sumatra in 1825. The old *Dutch Church*, of brick, is said to have been built by the Governor in 1678. In it are fourteen escutcheons, dating from 1685 to 1770, with inscriptions in Dutch. Between Chinsura and Chandernagore is Biderra, where the British, under Colonel Forde, obtained a decisive victory over the Dutch on 25th November 1759. It is said that the British Commander was aware that his nation and the Dutch were at peace, and wrote to Clive for an Order in Council to fight. Clive was playing cards, and wrote in pencil: "DEAR FORDE,—Fight them immediately, and I will send you an Order in Council to-morrow. —Thursday, 17th, 1.30 P.M."

The *Hooghly College* is to the S. of the church. There are 600 students. The cemetery is 1 m. to the W. of the church; it is well kept, and contains many old tombs of former Dutch officials.

Bandel, 1 m. N. of Hooghly. A Portuguese monastery and church were built here in 1599, and the keystone with the date was erected in the new one, which is of brick, and very solidly built. It is dedicated to Nossa Senhora de Rosario. There are fine cloisters on the S., and a priory, in which is a noble room called St Augustine's Hall. The church was founded by the Augustinian missionaries, demol-

¹ See p. 76.

ished by Shah Jahan in 1640, and rebuilt by John Gomez de Soto.

About 6 m. above Hooghly is Satgaon, where there is a ruined mosque, which, together with a few tombs near it, is the only remnant of the old capital of Lower Bengal. It was built by Saiyad Jamal-ud-din, son of Fakhr-ud-din, who, according to inscriptions in the mosque, came from Amel, a town on the Caspian. The river of Satgaon, up to Akbar's time, formed the N. frontier of Orissa, and Satgaon flourished for 1500 years. Three centuries ago the Hooghly flowed by the town.

Down the Hooghly River from Calcutta to Sagar Island.

The Calcutta pilots, who numbered sixty-three in 1915-16, and were responsible for the safety of some 2299 vessels, with a tonnage of 9,583,348 tons up and down the river, occupy a higher position than any of their profession. Pilotage receipts amounted in 1915-16 to Rs.1,106,117. The Hooghly is a most dangerous and difficult river to navigate, as, apart from the chance of cyclones, which take place in any month except February, there is the normal danger of shoals and tides, which is a very real and a very great one. New shoals are continually forming, and nothing but a daily experience of the river can enable a pilot to take a vessel up or down safely. The most dangerous shoal—called the "James and Mary"—is 30 m. S. of Calcutta, just above the Rupnarain; but from the Damodar River to Hooghly Point, a distance of 6 m., the whole river is full of dangers. There has been no serious accident at this point for many years, and, although it represents the most dangerous spot on the river, the systematic dredging which has been carried out since the purchase of two

large dredgers has effected a marked improvement. The name of the above shoal dates from the wreck of a vessel called the *Royal James and Mary* on that bank in 1694. It appears first under this name in a chart dated 1711. The Hooghly used not to be navigated at night, nor until the tide made could it be ascended. The river has now (since 1915) been lighted in the Lower Reaches, that is, from Mud Point downwards, for a distance of 61 m.: vessels do not now usually anchor at Sagar Island, but, according to draft, can come up regardless of the state of the tide. The ordinary fall and rise of the tide is 11 ft. 8½ in. at Calcutta. A special feature of the rising tide is the bore, which hardly ever attains a height of 7 ft.; 6 ft. are regarded as the maximum, and that only as far as Chinsura. The bore reaches as far up the river as 5 m. above Nadia; it very seldom does any damage.

The view of the river, crowded with ships at anchor many rows deep all the way along the Strand and down to Garden Reach, is very striking; the forest of masts, the plain of the Esplanade, the Fort, and the fine buildings along Chowringhi, all give the idea of a great city—the premier city in India, though no longer the capital.

The vista to the N. from between Garden Reach and the Botanical Gardens is especially fine when the atmosphere is clear. Seven m. from Calcutta the last sight of the premier city of India is lost; 5 m. farther Budge Budge (Baj Baj; railway to Calcutta, 15 m.) is passed on the left; at a similar distance farther on Ulubaria, a small town, is passed on the right bank. Here the main road from Calcutta to the temple of Jagannath at Puri crosses the Hooghly, and here begins the Midnapore High-Level Canal. The river, which has hitherto followed a

S.W. course, now turns due S. to Hooghly Point.

At 27 m., a little above the mouth of the Damodar, is (on the left bank) Falta, the site of an old Dutch factory, and the place to which the British ships sailed on the capture of Calcutta by Suraj-ud-daula, and from which Clive advanced to the recapture of Calcutta for the British.

The Damodar is navigable as far as Amta, which is 25 m. from its mouth, by boats of from 10 to 20 tons, and large quantities of coal are brought down by this river from the Raniganj mines.

5 m. below Falta the Rupnarain River enters the Hooghly from the right bank nearly opposite Hooghly Point, and from here the river turns S.E. to Diamond Harbour, and then S. again.

At 12 m. up the Rupnarain river, on the right bank, is Tamluk, a very famous city in ancient times, and a maritime port of the Buddhists, where the Chinese pilgrim Fa Hian embarked for Ceylon in the beginning of the 5th century A.D. Hiuen Tsang 220 years later speaks of it as an important Buddhist harbour. It is now a long way from the ocean, but reached by the tide. There is a *Temple* here known in the locality by the name of Barga Bhima or Bhenna, which was originally a Buddhist temple. The shrine is surrounded by a curious triple wall.

At 48 m. from Calcutta is Diamond Harbour (left)—30 m. by a metalled road—marked by a large number of trees, where the E.I. Company's ships used to anchor. There is a Custom House here, and the officers board ships proceeding up the river. There is also a railway to Calcutta (35 m.), with five or six trains daily, in three or four hours.

At 56 m. is the town of Kalpi (left), which contains a large market-place for the sale of rice grown in the interior, and from which there is a road to Calcutta. Here the estuary of the Hooghly begins, and at 99 m., between Kedgerree and Sagar Island, it is 15 m. broad. At this island, where the Ganges is considered to join the sea, a gathering of from 30,000 to 50,000 pilgrims from all parts of India, but principally from the Bengal districts, takes place in the early part of January, the date of the great Bathing Festival of Bengal. The bathing ceremony, as a rule, lasts for three days, though the fair lasts for a couple of days longer. The island was overwhelmed by a cyclone in 1864, when only 1500 out of 5600 inhabitants escaped alive.

Sport is abundant. Deer, wild boar, and a great variety of sea-birds are found throughout the year.

Tigers are to be met with in the jungle; but tiger-shooting, as practised here, is very dangerous, and should not be attempted by inexperienced persons.

The sea is reached at 82 m., where there is a lighthouse of iron, 76 ft. high, commenced in 1808, on Middleton Point, at the S.W. end of Sagar Island. The floating light-vessel is 40 m. below this, and the outermost buoy 10 m. farther on, about 130 m. from Calcutta.

ROUTE 6.

Manmar to Daulatabad, The Caves of Ellora, Aurangabad, Jalna, and Secunderabad.

Manmar, 162 m. from Bombay (p. 35).—The railway passes near the S. side of the great rock of

Deogiri, or Daulatabad, affording a fine view of three sides of it. Permission to visit the fort must be obtained from the Station Staff Officer, Aurangabad, and a tonga for the journey from the Daulatabad station (8 m. to Rauza, 2 more to the Ellora caves) must be ordered beforehand from the Tonga Mail Agent, Aurangabad. The charge for a tonga is Rs.10, and a fee of Rs.2 additional is charged for each day's halt. It is impossible to see the caves properly in less than two days. The R.H.'s are beautifully furnished, with every requisite—china, glass, and plate. There is also a staff of servants; and a cook must be taken, also provisions, but ordinary supplies are available.

There is a fairly good little R.R. at Daulatabad station, with a fair supply of provisions. It is a good plan to leave Rauza early, see Daulatabad Fort, lunch at the station, and catch the train in either direction.

63 m. from Manmar is Daulatabad* (*Deogiri*), in the Nizam of Hyderabad's dominions, a 13th-century fortress, built on a huge isolated conical rock of granite, about 500 ft. high, with a perpendicular scarp of from 80 ft. to 120 ft. all round. On the E. side of the fortress were two outer lines of defence, and beyond these stood the walled city, now in ruins, and crossed from S. to N. by the road to Rauza and Ellora. On the left of the road stands the entrance to the outer line of defence, consisting of a hornwork with three gateways inside it, protected by a bastion 50 ft. high. Beyond the gate are (1) a Hindu temple with a lamp tower 13 ft. high; and (2) a small shrine of the Pir-i-kuds. On the latter side a little farther on are a large masonry tank, now dry, and a mosque converted out of a Jain temple, which has also served as a Hindu place of worship. Oppo-

site these the Chand Minar, a minaret of Turkish form, rises 100 ft.; it bears the date of 1435 A.D. The inner line of defence is now passed by a gate similar to that in the outer line, the first gate in both cases being defended by iron spikes against battering by elephants; and a steep flight of steps leads onwards to a third gate, giving access to a platform on the edge of the ditch, 40 ft. wide. On the right here is the *Chini Mahal*, with encaustic decoration, in which Abul Hasan Tana Shah, the last King of Golconda, spent thirteen years of imprisonment; close by on a bastion is a gun 21 ft. 10 in. long, called the Kila Shikan, or Fort Batterer. The moat is crossed by a narrow stone bridge, at the end of which the road ascends to the Balakot by rock-cut chambers and passages, and emerges into the air 50 ft. higher up. This point was formerly covered with an iron shutter, 20 ft. long and 1 in. thick, made in ribs (part of it is gone), which in case of siege was heated red hot, so that, if assailants could have penetrated so far, they would have encountered a fiery roof quite unapproachable. To provide ventilation for the fire a large hole has been tunnelled through the rock close by. Passing a gateway and the shrine of the Fakir Sukh Sultan, the path leads to a Barahdari, or pavilion, from which there is a fine view. It is believed to have been the residence of the Hindu Princess of Deogiri, and was a favourite resort of the Emperor Shah Jahan¹ in 1636. The pavilion has a wide veranda, with a precipice of from 100 ft. to 200 ft. in front, and a view to Aurangabad on the E. and to Rauza on the N. One hundred steps more must be climbed to reach the citadel itself, on a platform 160 ft. by 120 ft. At the W. corner is a one-gun bat-

¹ The Emperor's historian recorded a most exact account of the defences.

tery, 60 ft. by 30 ft. The gun is 19 ft. 6 in. long, with a bore of 7 in. On a bastion is a large gun, on which is a Gujarati inscription, saying that the funds for its construction were provided by certain Banias, and also a Persian inscription, naming the gun "Creator of Storms." Tavernier says that the gun on the highest platform was raised to its place under the directions of a European artilleryman in the service of the Great Mughal, who had been repeatedly refused leave to return to his native land, and was promised it if he could mount the gun on this spot.

The place was the capital of the Yadava dynasty after the fall of the Western Chalukyas. In the year 1293 Ala-ud-din, afterwards Emperor of Delhi, took the city. The citadel still held out, and he finally raised the siege of it on receiving a ransom of 15,000 lb. of pure gold, 175 lb. of pearls, 50 lb. of diamonds, and 25,000 lb. of silver. In 1338 A.D. Muhammad Shah Tughlak attempted to establish his capital in the Deccan, removed the inhabitants of Delhi to Deogiri, strengthened the fortifications, and changed the name to Daulatabad; but his plans ended in complete failure.

The road from Daulatabad to Rauza (8 m.) and the caves of Ellora ascends the steep hill called Pipal Ghat. It was paved by one of Aurangzeb's courtiers, as recorded on two pillars about half-way up the hill, where there are fine views.

Rauza or Khulabad is a walled town (2218 inhabitants), 2000 ft. above the sea, and is 2 m. from the caves of Ellora. It is the *Karbala* (holy shrine) of the Deccan Mussulmans, and is celebrated as the burial-place of many distinguished Muhammadans, amongst whom are the Emperor Aurangzeb and his second son, Azim Shah; Asaf Jah, the founder of the Hyderabad dynasty; Nasir Jang, his second son; Malik Ambar, the powerful Minister of the last of the Nizam

Shahi Kings; Abul Hasan Tana Shah, the exiled and imprisoned King of Golconda; and a host of minor celebrities.

Rauza once contained a considerable population, but the place is now in great part deserted. It is surrounded by a high stone wall (built by Aurangzeb) with battlements and loopholes. Old and ruinous mosques and tombs abound in every direction on each side of the road.

Midway between the N. and S. gates of the city is the grave of Aurangzeb in the Dargah of Saiyad Zain-ud-din, on the right side of the road. An ascent of 30 yds. leads to a domed porch and gateway. Some of the surrounding buildings are used as rest-houses for travellers, and one as a school. In the centre of the S. side is an exquisite little Nakkar Khana, or music hall, from the galleries of which music is played when festivals or fairs are celebrated. The W. side is occupied by a large mosque, the roof of which is supported on scalloped arches. Facing the N. end of the mosque is a small open gateway leading into an inner courtyard, in the S.E. angle of which is the door of Aurangzeb's tomb itself. Above the door is a semicircular screen of carved wood. The grave, which is uncovered, lies in the middle of a stone platform raised about half a foot from the floor. It is overshadowed by the branches of a tree (*Bukuli*) which bears sweet-smelling flowers; otherwise it is quite open to sun and rain, as it should be according to orthodox Muhammadan ideas. This Emperor, who was a man of austere piety, is said before his death to have desired that his sepulchre should be poor and unpretentious, in accordance with the tenets of the Koran, and to have expressly "desired in his will that his funeral expenses should be defrayed from the proceeds of caps which he had quilted and sold, an amount that did not

exceed Rs.10; and that the proceeds of the sale of his copies of the Koran, Rs.805, should be distributed to the poor."

Fifteen or twenty paces to the E. of Aurangzeb's tomb is a small quadrangular enclosure of marble, within which are three graves, the one on the right being that of the daughter of the Muhammadan saint buried close by; the next, that of Azam Shah, Aurangzeb's second son, attached to which is a small marble headstone carved with floral devices; and the one beyond, the grave of Azam Shah's wife. The whole is surrounded by a plain screen of white marble. Midway between these tombs and that of Aurangzeb is the mausoleum of Saiyad Zain-ud-din, on the E. side of which are inscribed a number of verses from the Koran and the date of the Saiyad's death, 1370 A.D. This tomb, however, was erected many years after that period by one of his disciples. The doors of the shrine are inlaid with silver plates of some thickness; the steps below it are embellished with a number of curiously cut and polished stones, said to have been brought here from time to time by Fakirs and other religious devotees of the shrine. A little distance to the rear of this tomb is a small room built in an angle of the courtyard wall, which is said to contain a robe of the Prophet Muhammad. It is carefully preserved under lock and key, and is only exhibited to the gaze of the faithful once a year—the 12th Rabi-ul-awwal.

Opposite this Dargah, on the left side of the road, is that of Saiyad Hazrat Burhan-ud-din, with the grave of Nizam-ul-mulk Asaf Jah, the first of the Nizams of Hyderabad. The entrance is through a large quadrangle, having open-fronted buildings on all sides, and a Nakkar Khana (music gallery) at the E. end. The W. end is used as a school for instruction in the Koran. A door at this end gives

access to an inner courtyard in which are a number of graves. Facing the entrance are the tombs of Asaf Jah and Nasir Jang, surrounded by a lattice screen of red sandstone, and that of Saiyad Hazrat Burhan-ud-din, a saint who died at Rauza, 1344. He was the successor of Muntajib-ud-din, sent by Nizam-ud-din Aulia (p. 273), from Upper India with 700 disciples a few years before the first invasion of the Deccan by Ala-ud-din, 1294, and was succeeded by Zain-ud-din. Deposited within the shrine are some hairs of the Prophet's beard, which are said to increase yearly in number. The shrine, however, boasts of a still more remarkable treasure, which is described by the attendants as follows: "For some years after its erection the disciples of the Saiyad were without means to keep it in repair or to provide themselves with the necessities of life. Supplication to the deceased saint, however, produced the following remarkable phenomenon. During the night small trees of silver grew up through the pavement on the S. side of the shrine, and were regularly removed every morning by the attendants. They were broken up and sold in the bazars, and with the proceeds thus realised the Saiyad's disciples were enabled to maintain the shrine and themselves. This remarkable production of silver is said to have continued for a number of years, until a small jagir was allotted to the shrine, since which time the pavement has only yielded small buds of the precious metal, which appear on the surface at night and recede during the day." In proof of these assertions the visitor is shown a number of small lumps of silver on the surface of the pavement. The shrine doors are covered with plates of white and yellow metal wrought into designs of trees and flowers.

Among the tombs between these

two shrines and the Ellora D.B. are those of Saiyad Raju Kattal, Malik Ambar, and the last king of Golconda. The D.B. is situated above the cliff in which the

CAVES OF ELLORA¹

are, and the road to them begins to descend immediately beyond it.

The Ellora group of Cave Temples is the largest and most varied of all, and comprises twelve Buddhist, seventeen Brahman, and five Jain works. The road down the Ghat passes the south side of the Kailasa Temple, and divides the caves into two groups of twenty to the left and fourteen to the right of it. The Buddhist caves lie at the S. end and the Jain caves at the N. end of the hill face, which is nearly $1\frac{1}{2}$ m. long, the Brahman caves and Kailasa being situated between the two groups. The local Brahman are apt to be rather troublesome in pressing their claims on strangers as guides and recipients of alms.

Buddhist Caves.—The first of these, to the S. of the Ghat road, and lying beyond three Brahman caves, is known as the Tin Thal (No. 12) or Three-Storied, and the farthest group at the S. end is named the Dherwara or Outcasts' quarter; the date of the latter extends from 350 to 550 A.D., and of the former from 650 to 750. No. 1 is a vihara, measuring $41\frac{1}{2}$ ft. by $42\frac{1}{2}$ ft., and having eight cells round it. No. 2, which was a hall for worship, is approached by a flight of steps, and is reached through a veranda carved with figures and having large *dwarapalas* guardians, at the door of the cave, which is flanked by a window on either side. The interior measures 48 ft. square, and

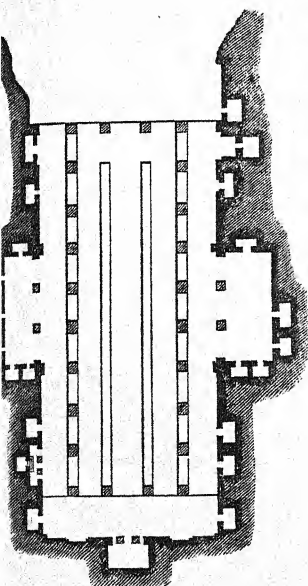
has a raised lateral gallery on each side; the roof is supported by twelve columns arranged in a square, with high bases and cushion capitals, and the two galleries have four pillars in front of them—all richly decorated. A shrine, with huge *dwarapalas* and a colossal seated Buddha in the centre of it and two standing Buddhas on either hand, occupies the middle of the back wall, and on each side of the shrine is a double cell elaborately carved. No. 3 was a vihara or monastery, measuring 46 ft. square, and having twelve cells round it; the twelve columns which support it have a drooping leaf or ear over their circular necks. In the N. end of the veranda is a chapel with a Buddha seated on a lotus supported by snake-hooded figures, and on the right of this is a pictorial litany.¹ No. 4 is a much-ruined vihara, now measuring 35 ft. by 39 ft. deep. At the inner end is a cross aisle, beyond which a shrine, with a statue of Buddha under the Bo-tree and two cells were excavated; the columns are similar to those in No. 2. No. 5, known as the Mahanwada, and formerly as the Dherwara cave, is again reached by steps. It is the largest single-storeyed vihara cave here, measuring $58\frac{1}{2}$ ft. by 117 ft. deep. The roof is carried by two rows of ten columns, similar to those in No. 2, with two more between them at each end, and two stone benches run down the cave parallel to the ranges of pillars. On either side of the cave is a recess with two pillars and a number of cells, and at the end is a shrine. From its peculiar arrangement it has been conjectured that this cave was a hall of assembly. No. 6, to the N. of No. 5, is reached through a lower hall with three cells on the E. side; it measures $26\frac{1}{2}$ ft. by 43 ft., and has an ante-chamber and shrine at the back of

¹ See Fergusson's *Indian Architecture*, both vols.

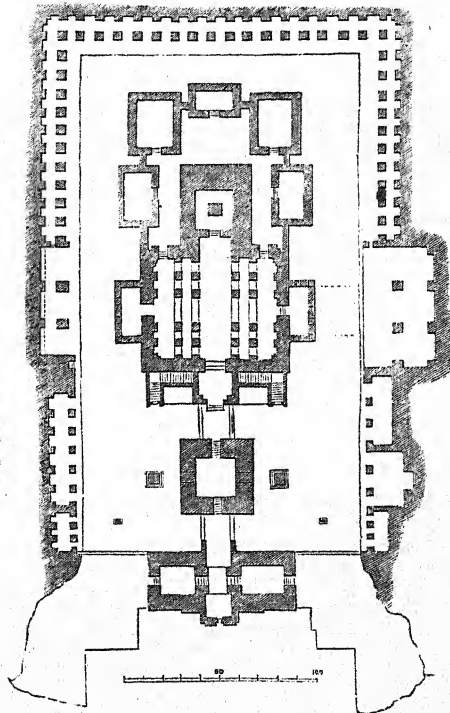
¹ See p. 58

it, the former richly carved, and the latter containing a large seated Buddha. The figure on a stone at the foot of the goddess Saraswati on the S. wall of the ante-chamber deserves notice. Beyond it is yet a third hall, measuring 27 ft. by 29 ft., with three cells on the E. and N. sides. No. 9 lies in

side, a shrine with a passage round it, and a seated image of Buddha in it, and a smaller hall on the W. side. On the face of the rock by this is a group of the child Buddha with his mother and father. The next excavation, No. 10, is the only chaitya or chapel cave of the group, and lies some way to the N.



The Mahanwada Dherwara Cave.



The Kailasa Temple.

the N.W. angle beyond the third hall, and is reached from the central hall of No. 6; it has a well-carved façade. No. 7, to which the stairs in the first hall of No. 6 lead, is a large vihara, 51½ ft. by 43½ ft., supported by four columns only. No. 8 is entered from this, and is a hall measuring 28 ft. by 25 ft., with three cells on the North

It is known as the Viswakarma or Carpenter's cave, and is considered to date from the end of the 7th century A.D. Fergusson (*Ind. Arch.*, I, 204) takes 600 A.D. as the medium date for the Viswakarma and its surroundings, and 750 A.D. as the time when Buddhism began to wane in W. India, but waits for inscriptions and other precise

data. In front of it is a large court, which is reached by steps, and from which a second flight of steps leads to the veranda. The galleries round the court are borne by elegant pillars, and at the foot of each of these was a fine stone lion facing outwards. At the back of the side galleries are two chapels elaborately carved, and at the ends of the back gallery or veranda are two chapels with two columns in front of them and two cells. The fine railed terrace above the veranda is reached by a flight of steps in the N. gallery. The façade is surmounted by a bold projecting cornice cut in the rock, and the great horseshoe window is here divided into lights, and loses its original shape. The interior measures 86 ft. by 43 ft. by 34 ft., and the nave and aisles, which run round the dagoba, are separated by twenty-eight columns. The dagoba is 27 ft. high, and has a colossal seated Buddha in the front of it. The roof is carved in imitation of ribs, and the projecting wall under it and the above columns is carved with two rows of panels, the upper with Buddha and the lower with representations of ganas or dwarfs. Farther N. is the Do Thal¹ cave (No. 11), which was subsequently discovered to have three storeys; it is also preceded by a court. The lowest storey consists of a veranda only, with a shrine and two cells at the back of it. The middle storey has eight pillars in front and five chapels or cells, of which only the three richly-carved ones in the middle are completed. The centre chapel is a small hall with two pillars and a statue of Buddha in the shrine. N. again of the Do Thal is the Tin Thal² cave (No. 12), dating probably from about 700 A.D. This again has a fine fore-court (a feature which adds great picturesqueness to the Ellora

caves), but in this instance without side galleries. Steps lead from the court into a great hall, 115 ft. by 43 ft., with three rows of columns; beyond this a second hall, 42 ft. by 35 ft., borne by six columns, extends up to the shrine, with a seated statue of Buddha on either wall. The shrine contains a colossal seated Buddha and a number of other figures. On the walls of the front hall a relief of Buddha with attendants and *chauri* bearers is repeated in many places.

Steps at the S.W. corner of the front hall lead to the middle storey, borne by two rows of eight pillars. The shrine is elaborately carved, and two fine *dwarapalas* guard its door. The topmost floor is carried by five rows of eight columns, the hall measuring 115 ft. by 70 ft. Along both side walls are large figures of Buddha seated on a throne, and on the back wall are the seven human Buddhas, seated under trees at the one side and under umbrellas at the other. The antechamber, which is very large and has two pillars, is sculptured all round with large figures; in the shrine is a very large squat Buddha.

Brahman Caves.—Fifty yds. N. of the Tin Thal Cave begins the group of sixteen Brahmanical caves, or seventeen including the Temple of Kailasa. The first of these is a plain room only; next comes the Ravan ka khai,¹ and then the Das Avatāra, between which and the Kailasa temple the Ghat road reaches the plain. All these were probably constructed in the 7th and early part of the 8th centuries A.D., the temple being the latest in date. The Ravan ka khai presents a very different arrangement from that of any of the Buddhist caves. At the entrance were four columns making

¹ Do Thal = Two storeys.

² Tin Thal = Three storeys.

¹ Ravan ka khai = Excavation of Ravana.

a front aisle; behind, twelve columns enclose the central space of the hall; and beyond these is a shrine standing free at the end of the hall. The pillared portion measures nearly 55 ft. sq., and the depth of the cave to the back wall behind the shrine chapel is 85 ft. The S. wall bears Saiva sculptures of the slaughter of the buffalo demon, Siva and Parvati playing chess, and Siva dancing the tandava, Ravana shaking Kailasa and Bhairava;¹ while the N. wall has Vaishnava representations of Durga, Lakshmi, wife of Vishnu, the Varahani, or boar incarnation of Vishnu, a four-armed Vishnu, and Vishnu seated with Lakshmi. Inside the shrine is an altar and a broken figure of Durga; in the passage outside it on the S. side is a group of three skeleton demon gods, Ganesh and the seven great goddesses, each with a child, and her cognisance below—viz., Chamundi² and owl, Indrāni and elephant, Varahani and boar, Lakshmi and Garuda eagle, Kaumari and peacock, Maheswari and buffalo, Brāhmi and hans or goose. The Dās Avatara³ cave is next reached by a considerable flight of steps in the rock. It stands at the end of a large court hewn in the rock, which in this instance has a chapel in the middle of it and smaller shrines and cisterns round it; inside the chapel are four columns on a platform which perhaps once had an image of a bull (nandi) on it. The cave has two storeys, of which the lower is carried by two rows of eight plain pillars, two more standing between four cells in the back wall. From the N.W. corner of the cave a staircase leads first to a landing

with eleven reliefs of Hindu gods, beginning with Ganesh and ending with Durga, and then to the upper storey, which measures 95 ft. by 109 ft. deep, and is supported by seven rows of six columns, those in the front row being richly carved. The sculptured scenes on the walls are mainly similar to those in the preceding cave; among other noticeable scenes are Bhairava with a necklace of skulls and the marriage of Siva and Parvati on the N. wall; Siva springing from a lingam and Lakshmi with elephants pouring water over her on the back wall; and Vishnu, resting on the five-hooded serpent, and incarnated as a dwarf and as Narsingh (man-lion), on the S. wall. In the shrine, behind an antechamber with two columns, was a lingam or emblem of Siva.

The Kailasa Temple is a marvellous structure, shaped and carved wholly out of rock *in situ*, the back wall of the court-pit in which it stands being over 100 ft. high, while the court itself is 276 ft. long and 154 ft. broad. A rock screen, pierced by a fine entrance passage, closes the court on the W. side; near it stand two gigantic stone elephants. Between the screen and the temple, and connected with both, is a fine nandi shrine, 26 ft. square and two storeys high, with a stone flagstaff on either side; and beyond this is the temple, measuring 164 ft. from front to back and 109 ft. from outside to outside of the side porches, and rising 96 ft. above the floor of the court. It consists of three parts—a porch, a central hall measuring 57 ft. by 55 ft., and borne by sixteen massive square columns arranged in four groups of four each, with broad aisles between, from W. to E. and from N. to S., and a dark shrine, 15 ft. square inside, with the Ganges and Jumna as guardians at the door.

¹ See pp. 24, 25.

² The name of this goddess, a specially ferocious form of Durga, is derived from the two giants Chanda and Munda, whom she slew. She wore an elephant hide and a necklace of corpses, and used to rejoice in human sacrifices. See play of Malati and Madhava in Wilson's *Theatre of the Hindus*.

³ Dās Avatara = Ten Incarnations.

A passage leads all round the shrine and to five chapels placed at the sides and back of it; these illustrate the shape of the cells on the terraces of structural Buddhist viharas. The solid basement on which the temple stands is carved with a splendid series of immense elephants and monsters projected from the wall, and forms quite one of the finest remains of antiquity in the whole of India. At the sides of the bridge connecting the porch and nandi chapel, and of the staircases leading to the former, are large sculptures and reliefs, the latter representing scenes from the *Ramayana*. On the S. side of the court opposite the porch is a rock-cut gallery, borne by two columns, with statues of the seven great goddesses and Ganesh, and E. of this is a plain cave, 55 ft. by 34 ft., borne by four pillars, and with a veranda, also with two columns. There is also an upper storey to this cave, once connected with the temple by a flying bridge, under which, on the temple wall, is a relief of Ravana shaking Kailasa. From this point the E. half of the court round to the N. side porch of the temple is encircled by a corridor cut in the rock, with twelve large compartments of sculpture on the S. side, nineteen on the E., and twelve again on the N., representing various Saiva and Vaishnava scenes. The view of the temple from under the great cliff at the E. end is extremely impressive. W. of the N. corridor is another, but plain, one, under the large Lankeswar cave. This is 108 ft. by 60 ft., exclusive of a nandi chapel in front of it, and is reached by a dark winding staircase from yet a fifth corridor W. of the fourth. The cave is borne by sixteen pillars arranged as in the Kailasa temple, and by two rows of five and four more columns on the outer edge of the S. and W. sides, two in front of the shrine completing the whole number of twenty-

seven; between the columns of the outer lines is a sculptured rail, and in the back aisle of the cave are a number of large sculptured scenes. At the sides of the door to the shrine are female guardians; the altar inside has been broken. In the N.W. corner of the court is a small cave shrine with two pillars in the front decorated with representations of the three river goddesses of the Ganges, Jumna, and Saraswati; and above this is a small unfinished excavation.

A footpath near the N. side of Kailasa leads up to the plateau past a cave with a Trimurti, or Triad figure of Siva, in it (p. 23). Farther N. are four unimportant Brahman caves, beyond which the Rameswara cave is reached. This is a Saiva temple, once with a porch in front of it, borne by three rows of four pillars very varied in design; it has but few carved scenes. A corridor formerly ran round three sides of the forecourt. The next important cave is known as the Nilkantha; it has a small ruined chapel in the forecourt, from which thirteen steps lead into the cave, measuring 70 ft. by 44 ft. In the shrine is a lingam. The Khumarwada cave, 95 ft. by 27 ft., including the smaller hall at the back, has a figure of the sun god in his seven-horse chariot in the vestibule to the shrine. The next temple is a large hall with several chapels, measuring 112 ft. by 67 ft., and supported by columns of the Elephanta type; at the door of the shrine are very large *dwarapalas*. The path now reaches a fine ravine, over the scarped head of which a waterfall descends after rain. On the S. side of this is the Vaishnava, Milkmaid's, or Gopi cave, and on the N. side the cave named Sitaki Nahani (or bath). The veranda of the former is ruined, but on the back wall of it pierced by a door and four windows, are various carved scenes; the inner hall measures 53 ft. by 22 ft.

The second is an extremely picturesque excavation, which will remind every one of the great cave at Elephanta, believed to be slightly more modern than this, which dates from about 650-725. It consists of a principal hall, facing nearly W., with a recess on the S. side opening on to the ravine, and a larger recess of irregular shape on the N. side. The central hall measures 149 ft. in depth and 95 ft. in breadth, including the two side aisles, which lead to the recesses, and is borne by four rows of four columns, the two eastward of the middle rows being merged in the walls of the free shrine, while two more stand at the W. end of these rows and correspond with those at the sides of the entrance. The steps to this are guarded by two lions, and in front of them is a circular platform for a nandi. In the veranda and front aisles of the cave are carved reliefs much as at Elephanta. The shrine is a small square room, approached by four doors as in that cave, and contains a lingam. From the S. recess steps descend to the ravine, of which a charming view is obtained at this point. The N. recess is also reached by steps guarded by lions; a small low cave exists at the E. end of this, and from the S.W. corner of the recess a passage has been broken into an excavation with six pillars; there is usually water in this wing, which prevents any close examination of it.

Jain Caves.—The five Jain caves, dating from the 8th to the 13th century, lie about 200 yds. beyond the most northerly of the Brahman caves, the first being the Chhota Kailasa, some way up the face of the hill. This temple is in a pit measuring 130 ft. by 80 ft., and has a hall 36 ft. square, borne by sixteen columns, and a shrine 14½ ft. by 11½ ft. It was imitated from the great Kailasa temple, and left incomplete. The

Indra Sabha is entered through a rock screen facing S., in front of which, to the E., is a temple with statues of Parasnath, Gomata Swami with creepers round his limbs, and the last Tirthankar, Mahavira. In the S.E. corner of the court is a large elephant, and opposite it was a monolithic column, in front of a cave with six columns, containing reliefs of the same three Tirthankars. In the centre of the front of the court is a chapel with a quadruple image of a Jain saint; at the back of the court is an incomplete hall borne by twelve columns, with two more between the S. and N. colonnades and the veranda and shrine. Over this, reached by a staircase in the veranda, is a second hall with wings to the front of it, each with a small temple borne by four columns. The hall, measuring 55 ft. by 65 ft., is supported by twelve pillars, in the centre of which was once an image; the walls all round are divided into compartments filled with Jain saints, and the shrine has a statue of Mahavira. The figures at the ends of the veranda are noticeable, as is the cornice round the shrine door. The Jagannath Sabha, a little farther on, is also a double cave with a court in front of it. On the W. wing of this is a small hall, and at the side of the main cave is a small chapel; the cave is supported by four columns in front and by four more inside; the sculptures in it are in an unusually perfect condition. The outside staircase to the upper storey leads to another hall, 55 ft. by 45 ft., the ceiling of which was once painted in concentric circles, and the walls of which are sculptured all over with figures of Mahavira and Parasnath. This cave connects internally with the Indra Sabha, and also with another to the W. of it consisting of a veranda with two columns and a small hall with four. On the top of the hill in which the

Jain caves are excavated is a rock-hewn statue of Parasnath 16 ft. high, protected by a structural building raised over it some 200 years ago.

It may be found more convenient to proceed by tonga from Ellora to Aurangabad, 13 m. (a small extra charge is made for this), than to go there by railway from Daulatabad.

71 m. Aurangabad (D.B.). This thriving city (population 34,902), which has a considerable trade in cotton and wheat, was first called Khirki, and was founded in 1610 by Malik Ambar, the head of the Abyssinian faction in the Ahmadnagar State. The town lies to the E. of the Cantonment. 1 m. N.E. of it is the grand Mausoleum of Rabi'a Daurani,¹ wife of Aurangzeb. The great door at the gateway is plated with brass, and along the edge is written, "This door of the noble mausoleum was made in 1089 A.H., when Ataullah was chief architect, by Haibat Rai." Near the inscription is an infinitesimally small figure, which is said to be a bird, indistinctly carved, and there is a similar carving on the door of the mausoleum itself. It is a common joke amongst natives, when any man asserts that he has been to this mausoleum, to ask if he saw the bird there, and if he answers in the negative, to dispute his having seen the mausoleum at all. The curious roof of the gateway of the mausoleum should be observed. In the garden is a long narrow basin of water, in which fountains used to play, and on either side of the water is a walk and ornamental wall. The main fault of this otherwise beautiful building, which is compared to the Taj, is the want of sufficient height in the entrance

archway. In the wall of the mausoleum is a second but much smaller door, only 6 ft. high, plated with brass, where the second bird is pointed out. The carving of the flowers on this door is curious, and that of the dragons particularly so. The bird is on the edge of the door close to the upper central knob. Those who wish to enter the tomb are expected to take off their shoes. The cenotaph is enclosed in an octagonal screen of white marble lattice-work exquisitely carved, and stands on a raised marble platform.¹ The place for the slab is empty, and nothing but earth appears. This is much approved by Moslems, as showing humility. In the gallery above the tomb is a marble door exquisitely carved. The Government of the Nizam has gone to great expense in restoring this mausoleum. Below the right corner of the platform is a second tomb, said to contain the remains of Rabi'a Daurani's nurse. There is no inscription. To the W. of the mausoleum is a mosque of brick faced with cement (*chunam*) of a dazzling whiteness. The pavement is covered with tracings of prayer-carpets. The *mimbar*, or pulpit, is of marble.

The Pan Chakki, or water-mill, the shrine of Baba Shah Muzaffar, a *Chishi* (p. 190) and spiritual preceptor of Aurangzeb, is perhaps the prettiest and best-kept shrine in this part of India. It is situated on the right of the road from the Cantonment to the Begampura bridge, and on the very edge of the Kham, the river of Aurangabad. In the garden is a brimming tank of clear water, full of fish from 1 ft. to 3 ft. long, of a species called *Khol*. This tank overflows into a lower one, and that again into a narrow conduit. Beyond the first

¹ By some writers the lady is said to have been a daughter of the Emperor, which is a mistake. The gravestone is nameless.

¹ Tavernier mentions this tomb in his travels, and states that he met carts coming down from N. India with white marble for it.

tank and the ornamental garden is a second and much larger one. It is entirely supported on vaults, with two rows of massive pillars. Below is a noble hall, reached by steep steps, down to the level of the river. On the right of the second tank is a fine mosque, the roof of which is supported by four rows of massive pillars. In two of the rows the pillars are of teak, and in two of masonry. At the S.W. corner of this mosque, in a little garden, is the diminutive Tomb of the saint, of beautiful light-coloured marble.

$\frac{1}{4}$ m. N. from the *Pan Chakki* is the *Mecca Gate* of the city and the *Mecca Bridge*, which are probably some centuries old. The top of the parapet of the gateway is 42 ft. above the road which passes over the bridge. The flanking towers are surmounted by domes. Inside the gate there is a black stone mosque built by Malik Ambar. In the centre is a niche with the Divine Name, and "Victory is near." Above that is the *Kalima* and some verses of the Koran written in difficult Tughra. Close by is a recess with a bell-shaped ornament. This is perhaps the oldest mosque in the city.

The Government Offices are 2 m. to the S.E. of the Cantonment, and in or near the *Kila Ark* or citadel, built by Aurangzeb. This spot not long ago was entirely covered with cactus and jungle, the haunt of hyenas and other wild animals. It was, however, the site of gentlemen's houses in the reign of Aurangzeb, when Aurangabad was the capital of the Deccan. Sir Salar Jang ordered the site to be cleared, and, when this was done, numerous reservoirs, fountains, and other works of interest were discovered. These have been repaired, and the wilderness has literally been changed into a blooming garden. Only one archway of Aurangzeb's citadel remains, but here fifty-three great

Princes, like the Maharajas of Jaipur and Jodhpur, attended the court of the Emperor with thousands of armed retainers, and Aurangabad was then the Delhi of the South. As soon as Aurangzeb died the Princes departed, and Aurangabad sank at once into comparative insignificance. The Jami Masjid is on the right of the road, amid a grove of some of the finest trees in India. One immense *Ficus Indica* stands close on the road, and shades some 300 ft. of it. The Mosque and minarets are low, but the façade is rendered striking by an ornamental band of carving 2 ft. broad along the whole front. Over the central niche are the *Kalima* and inscriptions in Tughra writing, as in Malik Ambar's Mosque. This mosque is wonderfully well kept, and there is, what is not seen anywhere else, a net covering the entire façade, so that no birds or other creatures can enter. Malik Ambar built half this mosque and Aurangzeb the other half.

The Caves of Aurangabad are beyond the N. outskirts of the city near Rabi'a Daurani's mausoleum. A road has recently been constructed which goes right up to the foot of the hill, wherein the caves are excavated. The nine Buddhist caves here are the latest of all Buddhist works in India, and date principally from the 7th century; there are five in the W. group, and four in the other lying $\frac{1}{4}$ m. farther E. No. 1, at the W. end of the first group, is a vihara, a good deal higher up than the other four caves adjoining it. Only the porch and veranda (76½ ft. by 9 ft.) were completed, and the former has been crushed by the fall of a mass of rock; the hall was intended to be one of twenty-eight pillars. No. 2 was intended to be a hall for worship only. At the back of the veranda, 21½ ft. by 13 ft., is an aisle, and behind this is a shrine with a passage all round

it; at the sides of the shrine door are two tall figures standing on a lotus flower and *nāga* figures, and inside is a seated figure of Buddha, 9 ft. high, in the teaching attitude. Many reliefs of similar figures are on the walls of the shrine and the passages. No. 3 is a vihara hall, 41½ ft. by 42½ ft., with twelve columns splendidly decorated as in the late caves at Ajanta; there is a decorated recess also, and on each side two cells. In the front corners of the shrine are a number of life-sized worshipping figures with garlands and elaborate head-dresses. No. 4 is a chaitya or chapel cave, much ruined. It was only 38 ft. long and 22½ ft. broad, and was carried by seventeen plain columns; the dagoba was nearly 6 ft. in diameter. It dates probably from the 1st or 2nd century. Of No. 5 only the shrine remains, now dedicated to the Jain Parasnath. No. 6, the first of the E. caves, is again much higher up the hill face than the other three caves in that group. The hall was borne by four columns, and the antechamber of the shrine by two more; in the side walls are four cells, and in the back wall two. The shrine has a passage round it, and a smaller Buddha with smaller worshippers in front. There are traces of painting on the roof of the front of the cave. No. 7 has a veranda with four columns and a chapel at either end, and a hall 38 ft. by 28 ft., in the centre of which the shrine has been placed, while three cells have been excavated in each side wall, and two chapels with sculptures in the back wall. To the left of the entrance to the hall is one of the best representations of the Buddhist Litany (p. 58); to the right is a figure of Manjusri, patron of the Mahāyana sect. The front of the shrine has three large female figures on either side; on the left of the figure of Buddha in the shrine is the representation of a dance and of female

musicians. No. 8 consists of a ruined lower storey and an incomplete upper storey, with a hall 27 ft. by 20 ft. No. 9 is also higher up in the cliff. It consists of a long veranda hall with three chambers and shrines opening from it. On the W. wall is a sculpture of the dead Buddha 16 ft. long. The sculptures and arrangements of these caves show a distinct approximation to the Brahman caves of Ellora.

110 m. from Manmar is Jalna (D.B.), a Cantonment of the late Hyderabad Contingent (population 20,000). From this place the battle-field of Assaye, 30 m. distant, may be visited in the inside of a day, if arrangements are made beforehand by taking a motor car or for a tonga and two relays of horses on the road, through the Tonga Mail Agent of the place. Several old forts, such as once covered all the Deccan, are passed *en route*, and the two fortified villages of Pipalgaon and Warur on the Kaitna river, which showed the Duke of Wellington where the ford was, still stand on either side of the stream. A fine view of the field of battle fought on 23rd September 1803 is obtained from the tower of the fort of the village of Assaye, on the bank of the Juah, between which and the Kaitna the Mahratta army was drawn up after it was compelled by the British manoeuvre to change front from the line of the Kaitna, which it originally faced. The forces of Sindhia and of the Bhonsla Raja of Nagpur consisted of 16,000 infantry and 20,000 cavalry, and the British force of 4500 men all told; the killed and wounded on either side were 12,000 and 1600. N. of it lies the spot where the British who fell in the battle were buried. It is under contemplation to erect a memorial here.

392 m. from Manmar is Secunderabad (p. 514).

ROUTE 7.

BHUSAWAL to CALCUTTA (HOWRAH) by Akola, Wardha (expedition to Warora and Chanda), Nagpur, Kampti, Raipur, Bilaspur, and Sini, and from Sini to (a) Purulia and Asansol, and (b) Kharakpur.

By this line a new route from Bombay to Calcutta (1223 m., or about 130 m. shorter than any other) is opened up. The fares are Rs.91.1, Rs.45.9, and Rs.13.13 (Rs.15.10 by the mail train). The time occupied by this is 42½ hours.

It taps an immense territory of the Central Provinces which had previously been inaccessible to external trade, and provides an outlet for the great wheat and seed-producing district of *Chattisgarh* (the thirty-six forts), one of "the granaries of India." The scenery in parts of the line, notably at *Darehassa*, *Dongargarh*, and *Saranda* (p. 120), is very fine.

The Route from Bombay to

276 m. from Bombay, Bhusawal junction (R.) is described in Route 2.

Soon after leaving Bhusawal the traveller enters the districts of Berar (population 3,057,162), which continue almost all the way to Nagpur. They belong to H.H. the Nizam, but were assigned to the British by a treaty, in 1853, for the support of the Hyderabad Contingent Force. This treaty was remodelled in December 1860, by which, for the Nizam's services in the Mutiny of 1857, his debt of 50 lakhs was cancelled, the districts of Dharaseo and the Raichur Doab were restored, and the confiscated territory of Sholapur was ceded to him. By a recent arrangement of December 1902, made

with H.H. the Nizam, involving a fixed payment of 25 lakhs yearly to the Hyderabad State, the permanent administration of the Berar districts by the British Government has been secured, and they have been added to the Government of the Central Provinces; while the Hyderabad Contingent Force has been formally added to the Indian Army.

The fertility of the Berar districts, which form one of the richest and most extensive cotton-fields in India, is very striking. The soil is black loam overlying basalt. The rainfall is regular and abundant, and at harvest-time the whole surface is one immense waving sheet of crops. The districts of Berar are Akola, Amraoti, Buldana, and Yeotmal.

333 m. Jalamb junction station.

Branch 8 m. S. to *Khamgaon* station, where there is an important cotton mart.

363 m. from Bombay, Akola station is the headquarters station of the West Berar district of that name.

A road from Akola runs S. 72 m. to the important town and military station of *Hingoli*. About 30 m. from Akola is the town of *Mehkar*, and 15 m. S. of Mehkar is a curious soda lake called *Lonar*, formed in the crater of an extinct volcano. The salt is used for washing and dyeing purposes, and is exported in considerable quantities.

413 m. Badnera junction station (refreshment and waiting-room, D.B., and spinning and weaving mill).

Branch 6 m. N. to Amraoti station (waiting-room, D.B. near railway station). Amraoti is the headquarters of the Commissioner of the Berar Division. There is a cotton market here.

The only object of interest near

is the hill fort of Gawilgarh a stronghold of the Raja of Berar, which was taken by Colonel Stevenson on 15th December 1803, co-operating with General Wellesley, afterwards the Duke of Wellington, in the Second Mahratta War. It is situated S.E. of Chikald, which is a small sanatorium, dating from 1839, on a plateau in the Satpura hills, about 3664 ft. above sea-level, 5 m. long by $\frac{1}{2}$ m. broad. It is visited during the hot season chiefly by a few officers from the neighbouring headquarters of Nagpur and Amraoti; the bungalow accommodation is very limited, and the place does not attract non-official visitors. There is no railway communication to this place, but there is a good road 30 m. from Ellichpur (the nearest railway station to the fort), and journeys are performed by tongas. There are D.B.'s at convenient distances along the route.

471 m. Wardha (R.), chief town of the Western District of the Central Provinces on the Great Indian Peninsula Railway, 471 m. from Bombay and 49 m. from Nagpur, is the junction station for the branch line to Warora, and to the Ballarsha Colliery in the Chanda District. The town is favourably situated for trade, and is steadily increasing in importance as a considerable cotton mart. There are a D.B., a Sarai, a Town Hall, High School, Church, and Circuit House; also a Medical Mission of the Free Church of Scotland, with fine Hospital. The only building worth notice in the heart of the town is the late Rao Bahadur Bachraj's temple of Lakshminarayan, which is richly carved and decorated.

Hinganghat, a station on the Wardha Ballarsha branch, 21 m. from Wardha, is a very old and important cotton market. There are a waiting-room at the station,

and a traveller's bungalow close by, and two cotton-spinning and weaving mills, besides a few cotton ginning and pressing factories.

45 m. Warora station, a town in the Chanda District of the Central Provinces, and a considerable cotton mart.

74 m. is Chanda, the headquarters of the Chanda District (D.B.), and a most attractive spot. The town is surrounded by a continuous wall of cut stone $5\frac{1}{2}$ m. in circuit. Inside the walls are detached villages and cultivated fields. The foliage is beautiful, and there are extensive forest preserves near. The tombs of the Gond kings, and the temples of Achaleswar, Maha Kali, and Murlidhar, are all worth a visit. At Lalpet, in the town, a large space is covered with monolith figures of gigantic size, which appear to have been prepared for some great temple never erected. The branch line is to be extended to Warangal (p. 515).

520 m. from Bombay, Nagpur, $21^{\circ} 9' N.$, long. $79^{\circ} 7' E.$ (703 m. from Calcutta) is the capital of the Central Provinces, which have an area of 100,000 sq. m. and a population of 16,033,310.¹ The present Chief Commissioner is the Hon. Sir Benjamin Robertson, K.C.S.I., C.I.E.

The District of Nagpur itself has an area of 3840 sq. m. Among the inhabitants are 48,991 aborigines called Gonds; the total Gond population for the whole of the Central Provinces being 2,333,893. Of these the hill-tribes have black skins, flat noses, and thick lips. A cloth round the waist is their chief garment. The religious belief varies from village to village. Nearly all worship the cholera

¹ Inclusive of Berar and the Feudatory States.

and the small-pox, and there are traces of serpent-worship.

The ancient history of the Provinces is very obscure. In the 5th century A.D. a race of foreigners, *Yavanas*, ruled from the Satpura plateau, and between the 10th and 13th centuries Rajputs of the Lunar race governed the country round Jubbulpore, while the Pramars of Malwa ruled territory South of the Satpuras. The Chanda dynasty of Gonds reigned probably as early as the 10th or 11th century, and the Haihayas of Chattisgarh were of more ancient date. In 1398 there were Princes reigning at Kherla, on the Satpura plateau, of whom Ferishta says: "They possessed all the hills of Gondwana." In 1467 they were conquered by the Bahmani kings. In the next century the Gonds again rose to power; but in 1741 the Mahratta Bhonslas invaded the country. After the events of 1817 the British annexed the Saugor and Narbada territories, and in 1853, on the death of the last Raja, Raghoji III., without heir of his body, Nagpur and other Districts were taken over, and in 1861, with the territories above mentioned, were formed by Lord Canning into the Central Provinces. On the 13th of June 1857 the native cavalry of the Nagpur Irregular Force conspired with the Muhammadans of the city to rise against the British, but the Madras infantry and artillery remained loyal, and the outbreak was suppressed, chiefly by the resource and energy of Mr R. S. Ellis, the Deputy Commissioner. In anticipation of the possibility of further trouble Sitabaldi Fort was provisioned to stand a siege, but fortunately the emergency did not arise.

Nagpur (population 134,712) is the headquarters of the Government of the Central Provinces. The municipality includes, besides the city, the suburb and civil station of Sitabaldi. In the centre,

W. of the railway station, is Sitabaldi hill, crowned by a fort (built in 1818, and possessing many antique specimens of arms), which commands a fine view, and is itself a landmark for miles round. At Sitabaldi, on the 26th and 27th of November 1817, the Mahratta troops of the Bhonsla Raja, Appa Sahib, attacked the resident, Mr (afterwards Sir Richard) Jenkins, and the few troops he had been able to assemble. After a desperate engagement, during which the Mahrattas for a time got possession of one of the two eminences of the Sitabaldi hill, the British were at length victorious, the fortunes of the day being turned by the brilliant charge of a small body of native cavalry under Captain Fitzgerald. But the disbandment of the army was only obtained after a second battle, in which the Mahrattas were completely routed. Appa Sahib escaped, and died in exile. A child was raised to the throne under the title of Raghoji III., and on his death, in 1853, the country was annexed by the British.

W. of Sitabaldi hill is the civil station, in which are the new Secretariat, a fine building in modified Renaissance style; the Courts; the Victoria Memorial Technical Institute; the new Central Provinces' Club-house; the English Church has been enlarged into a handsome Cathedral; a large Roman Catholic Cathedral and school; an important branch of the Missions of the Free Church of Scotland; two hospitals for men and women; and a fine Mahratta church. Beyond, to the N., are the Police Lines and the Sadr Bazar, and the suburb of Takli, once the headquarters of the Nagpur Irregular Force. There is a fine new Government House on Takli hill; in the hot weather the residence of the Chief Commissioner is at Pachmarhi. Sitabaldi is the suburb South of

the hill of that name. Below the glacis is the railway station; beyond, to the E., is the Jumá Talao, a large tank; and still farther E. is the city, hidden in foliage. Three great roads lead from the civil station through the city—one on the N. and one on the S. bank of the tank; the third, and most Northerly of the three, crosses the railway by a bridge to the N. of the station. Besides the Jumá Talao, there are two other fine tanks, the Ambajheri and Telinkheri, 4 m. and 3 m. respectively W. of the city. The former of these, built by the Bhonslas over a century ago, was in 1873 brought into use as a reservoir. The city's water supply has since been very greatly increased by the opening, in 1911, of the large Gorewara reservoir, about 4 m. to the N.W. of the civil station. The chief gardens are the Maharaj Bagh, near Sitabaldi, the Tulsi Bagh, inside the city, and the Paldi, Shakardara, Sonagaon, and Telinkheri in the suburbs.

Nagpur is famous for its delicious oranges, quantities of which are exported. There are two large cotton-mills. There is also a museum.

The *Bhonsla Palace*, in the city, built of black basalt, was burned down in 1864, and only the Nakkar Khana, or Hall of Music, remains. Near it are the Hislop College and the Town Hall. The Morris College was also formerly in this neighbourhood, but has been removed to the old Residency building, at the foot of the Western slope of Sitabaldi hill.

The *Cenotaphs of the Bhonsla Rajas* are in the Shukrawari quarter, to the S. of the city.

The Great Indian Peninsula Railway terminates at Nagpur, and from this point E. to Calcutta the line belongs to the Bengal Nagpur Railway.

529 m. *Kampti (D.B.)*, a large town and military Cantonment

(population 17,155), on the right bank of the Kanhan river, which is spanned by a handsome stone bridge that cost £90,000. Close to it is the railway bridge—a fine iron structure that cost £100,000. Kampti dates only from the establishment of the military station in 1821. The English church was built in 1833, and there is a highly useful Roman Catholic establishment of the Order of St Francis de Sales, with a church and convent. There are five mosques and a number of Hindu temples.

Beyond Kampti, and 25 m. N.E. of Nagpur, from which it is easily accessible since the opening of a new branch of the Bengal-Nagpur Railway, is the Tahsil town of Ramtek (population 8732). The town runs in a straggling line along the foot of a fine, well-wooded hill sacred to Rama, from whom it takes its name. The hill is crowned by a citadel with a double line of defences, and within the citadel, at the Western end of the summit, stands a group of temples, which are the object of pilgrimages from all parts of India. The inner line of defences was built by Raghoji I., the first Bhonsla ruler of Nagpur, but the citadel itself is much older, and the temples are shown by inscriptions to be at least 600 years old. The principal temples are those of Rama, and Sita, his wife. They are in a fine state of preservation, and their white roofs can be seen for a great distance. Below the Eastern end of the hill, in a picturesque valley, lies the village of Ambala, with a small tank surrounded by temples, erected by individual devotees. From Ambala a flight of steps rises to the summit of Ramtek Hill, and it is by this route that the pilgrims ascend.

559 m. *Bhandara Road station (D.B. near)* is about 7 m. from the district headquarters, which is close to the Wainganga river. It is the headquarters of a district of

the same name, and contains the usual public offices, schools, and institutions. Population 13,728. There are a D.B. and a Club. In the town there is a shop (Tyeb Ali's) where oilman's stores (not in great variety) can be obtained. Bhandara is on the main road from Nagpur to Raipur. A branch road runs to the railway station.

601 m. Gondia junction. A line runs from here N. to Nainpur, 74 m., and Jubbulpore (p. 39), 70 m. farther. A loop-line also runs S. to Nagbir, whence one branch goes to Nagpur and another to Chanda. There is a good D.B. not far from the railway station. At that station there are waiting- and refreshment-rooms, and from the latter good stores can be bought. From Gondia a road runs Southwards to Arjuni, where it joins the Great Eastern Road from Nagpur to Raipur, and the Districts beyond. The forests in the neighbourhood of Arjuni (D.B.) offer attractions to the sportsman.

Nainpur is the station through which the Mandla District is entered. This District has an area of 5089 sq. m.; population 405,234. The narrow-gauge Jubbulpore-Gondia branch of the Bengal-Nagpur Railway passes through two stations, Nainpur and Pindrai, within its boundaries. From Nainpur a branch line (27 m., opened in 1909) runs N.E. through Jamgaon, Chiraidongri and Bamhni-Banjar stations to Mandla town, the headquarters of the district. The railway station is on the opposite side of the river Narbada to the town; it is, however, included in municipal limits (Mandla Municipality; population 9380). There is no hotel, but a D.B. affords a certain amount of accommodation. Nainpur, a rising village of 3383 inhabitants, also has an excellent D.B. Pindrai has no D.B.

From an archæological point of view Mandla is of some interest as the capital of the Garha-Mandla Rajas. The dynasty was of Dravidian, not of Aryan, origin, and at one time was predominant in Central India. Driven from the rich plains of Jubbulpore and Saugor, however, the Rajas re-established themselves first at Ramnagar, a riverside village 10 m. from Mandla, and afterwards at Mandla. Hirde Shah, who reigned in the middle of the 17th century, built himself a lordly palace at Ramnagar. Its ruins possess some interest, but the palace has no architectural beauty. It is a massive three-storied pile, built for strength alone, and commands a magnificent view of the river Narbada, which flows at its foot. Mandla fort was built a few years later by a succeeding Raja; on three sides it is surrounded by the Narbada, and on the fourth by a deep ditch. A lofty wall, studded with bastions, once encircled it, but Mandla masons have robbed the old battlements piecemeal of their stones, and the site of the fort is now a luxuriant tropical jungle. The foundations of the wall, however, are still visible, and a few of the larger towers have survived the forces of nature and defied the mason's pick.

The river Narbada, which rises a mile or two outside the Eastern border of the District, forms in the neighbourhood of Mandla a ten-mile reach, nearly half a mile broad and of considerable depth. Its banks are studded with temples and ghats, for the water hereabout is of peculiar sanctity, and bathing in the sacred stream is popularly supposed to wash away all sins. The only temple of antiquarian interest is at Kukarramath, built by Jains about the 10th century. It is situated 9 m. from Dindori and 60 m. from Mandla. Local gossip has woven a curious tissue of legend round its origin, but the

commonest superstition is that a cobra with red eyes circles the neck of the image every night and spreads his hood over Mahadeo's head.

The District is rich in forests, which teem with game. Tiger, panther, bison, sambhar, barasingha, and chital are only a few of the varieties that may be found in this happy hunting-ground of the big-game shooter. Means of transport and communication, however, are very difficult. Carts are practically useless, and heavy luggage must be carried either by camels or pack-bullocks. The easiest means of approaching the Eastern parts of the District is by train to Birsinghpur, on the Bilaspur-Katni extension of the Bengal-Nagpur Railway, and thence by an indifferent road, 42 m. in length, to Dindori, the headquarters of the Eastern Tahsil.

From Nainpur, in the Mandla District, there is also a line (narrow gauge) E. to Chhindwara *via* Seoni and Chhapara, a distance of 88 m. (Seoni is a District well provided with principal roads and D.B. and Inspection Bungalows.) By this line Chhindwara is 157 m. from Jubbulpore and 161 m. from Gondia. Chhindwara is also connected by a 2 ft. 6 in. gauge railway with Nagpur. There is also a branch from Chhindwara to Barukhi to tap the Pench Valley coal-mines.

The G.I.P. Railway Company is building a broad-gauge line from Nagpur to Itarsi, which will pass through the S.W. corner of the Chhindwara District, with stations at Pandhurna and Tigaon; a branch of this line has been constructed from Amla, in the Betul District, to Parasia, in Chhindwara to the Pench Valley coal-mines.

In the Chhindwara District is the old fort of Deogarh (about 19 m. from Umrana), on a spur of the S. range of the Satpuras,

about 24 m. S.W. of Chhindwara. The buildings consist of a wall enclosing the summit of an isolated hill, about half a mile long and 150-200 yards wide, with deep valleys on each side. Within are some stone tanks and buildings, the principal being the Badal Mahal, or cloud palace, and the Nakkar Khana, or entrance-gate. The tombs of the Gond kings are in the valley below.

There are good travellers' bungalows at Chhindwara and at many other places on the five metalled roads radiating from Chhindwara to (1) Nagpur, (2) Seoni, (3) Multai in the Betul District, (4) Narsinghpur, (5) Piparia on the Itarsi-Jubbulpore Railway. The last-mentioned joins the Piparia-Pachmarhi road at Matkuli. The District consequently offers the best facilities in the Central Provinces for motor-ing. Tamia, situated at a distance of 35 m. from Chhindwara on the last-mentioned road, at an elevation of some 3100 ft. at the top of the steep descent into the Narbada Valley, is famed for its beautiful situation and magnificent view across to the Pachmarhi Hills.

To return to the main route, Bhusawal to Calcutta,

615 m. Amgaon station (R.).

From 624 m. Salekasa and 631 m. Darekasa to

647 m. from Bombay, Dongargarh station (R. and H.) the line passes through hills and heavy bamboo jungles, and through a pass with a tunnel at the summit. Dongargarh is an engine-changing station, with a considerable European population connected with the railway. There is a guest-house in the town. The ruins of a fort are on the N.E. face of a detached hill, some 4 m. in circuit. Inside the fortified space there

are tanks for water supply, but no buildings.

At Amgaon, 95 m. E. of Nagpur, the Chattisgarh country is entered and continues to Raigarh station, at 338 m. The people of this country still consider themselves a separate nationality, and always call themselves *Chattisgarhias*. The Rajas of Ratanpur ruled originally over their thirty-six forts, each the chief place of a District; but about 750 A.D. the kingdom was divided into two, and a separate Raja ruled in Raipur. Kalyan Sahi, who ruled between 1536 and 1573, went to Delhi and made his submission to the great Akbar, and this prudent conduct resulted in the Haihaya rulers retaining their country until the Mahratta invasion in 1740.

The tract, which is regarded as one of the richest corn-growing countries in the world, and is known as the "granary of India," is in the shape of a vast amphitheatre opening to the S. on the plains of Raipur, but on every other side surrounded by tiers of hills.

708 m. from Bombay, Raipur station. The chief town of a District of the same name, and the headquarters of the Commissioner of *Chattisgarh*. The population is 35,335. The town is surrounded by tanks and groves of trees, which form its attraction. The *Fort* was built by Raja Bhubaneswar Singh in 1460, and in its time was a very strong work. Its outer wall is nearly 1 m. in circumference. Large quantities of stone were used in its construction, though no quarries exist in the neighbourhood. The *Burha Tank*, on the S., the same age as the Fort, covered nearly 1 sq. m.; but in later improvements it has been reduced in extent. The public gardens are on its E. shore. The *Maharajbandh Tank* was constructed by a revenue farmer in

the times of the Mahrattas, and close to it is the temple of Ramchandra, built in 1775 by Bhimbaji Bhonsla. There are several other reservoirs in the suburbs; and in the centre of the town is the *Kankali Tank*, constructed of stone throughout, at the close of the 17th century.

776 m. Bilaspur junction station (R.). This place is a large engine-changing centre.

Branch N.W. through a mountainous District and the coalfields of *Umaria* to 198 m. Katnijunction, on the E.I. Railway (p. 40). This branch passes at *Pendra* station¹ under the *Amarkantak* plateau (3500 ft.), where the *Narbada* has its source. There are several temples and a "Kund" or reservoir enclosing the head spring. The plateau is frequented by the "tirth basis" and other pilgrims.

About 15 m. E. of Bilaspur is the precipitous *hill of Dalha*, 2600 ft. high, rising sheer out of the plain, and affording a grand view.

15 m. N. of Bilaspur is *Ratanpur*, the old capital of the formerly self-contained kingdom of *Chattisgarh*, or the *Thirty-six Forts*, in which are now included the Districts of Raipur, Drug, and Bilaspur. The town lies in a hollow surrounded by hills. It ceased to be the capital in 1818, but the crumbling arches of the old fort, the broken walls of the ancient palace, and the half-filled-up moat which surrounded the city, recall its former condition. The population is under 6000. The Brahmins of Ratanpur are still the leaders of their class all over *Chattisgarh*. The numerous small temples in the vicinity are scattered over an area of 15 sq. m.,

¹ The scenery between Khongsara and Khodri, South of Pendra, is of exceptional beauty

and there are a large number of fine mango groves, with numerous tanks and temples scattered amidst their shade. Mixed up with temples, great blocks of masonry of uniform shape commemorate distinguished satis (*suttees*). The most prominent of these is near the old fort, where a large building records that there in the middle of the 17th century twenty ranis of Raja Lakshman Sahi devoutly fulfilled the duty of self-immolation. Kargi Road station, on the Katni branch, is a few miles from Ratanpur.

Before reaching

809 m. Champa station the Hasdo river is crossed. The stream cuts the coalfields of Korba some 20 m. N. of the railway; and in the jungles on its banks are still to be found a few wild elephants.

The line continues E. through a thinly-inhabited flat country to

858 m. Raigarh.

890 m. Belpahar station, on leaving which the Ib river, which flows S. into the Mahanadi river, is crossed by a considerable bridge. The scenery at the crossing is very fine.

898 m. Ib station is situated on the E. bank of the Ib river. Before crossing the Ib river, there is a siding for trains to the Rampur colliery in village Lamptibahal, about 2 m. from Ib station.

903 m. Jharsuguda junction station. There is a P.W.D. Inspection Bungalow, which could be available to travellers if not previously occupied by local officers.

Branch for the civil station of Sambalpur (D.B. and Circuit House, available for travellers), distant 31 m. Near here, at different times, diamonds of con-

siderable value have been procured. They are said to be found in the bed of the Mahanadi upstream from the town, but whether the source of supply is the Mahanadi or the Ib river is perhaps not clearly known.

From Jharsuguda the railway takes a N.E. course, and continuing through a well-inhabited plain country to.

909 m. Dhutra.

916 m. Bagdehi station, it enters the hills, in which it continues until the plains of Bengal are reached.

936 m. Garpos station. Hereabouts the forests are very dense, and in the rainy season they are largely resorted to by wild elephants. Between this and

958 m. Kalunga station the Brahmani river is crossed. The natives here earn a very fair living by washing the river-sands for gold. The view up-stream is very grand when the river is in flood.

991 m. Manharpur station. Here the railway enters the Saranda forests, which contain some of the finest sal trees (*Shorea robusta*) in India. The line winds round hills, passing close under them on both sides. The summit of the range is reached through a heavy cutting leading into a tunnel. During the construction of the Bengal-Nagpur Railway through these forests and heavy jungles very great difficulty was experienced in procuring labour, as they have a very bad reputation for unhealthiness. The inhabitants of these wilds are nearly all Kols, an aboriginal race. A light railway runs from Manharpur to the iron mines of the Bengal Iron and Steel Company—situated in the middle of the Saranda forests at Duia.

1029 m. Chakradharpur station. This is a large railway settlement

and engine-changing station. The town is also increasing in size and importance, as it is a centre for the timber trade. There is a D.B. with a khansama near the railway station. The main road connecting Patna with Cuttack runs through Chakradharpur. Starting from Chakradharpur a very pleasant motor trip can be made to Ranchi (72 m.), and thence to Hazaribagh, Gaya and Patna. The road to Ranchi is metalled and bridged throughout, and rising about 1500 ft. between the 64th and 40th m. runs through very picturesque forest scenery. From Chakradharpur also it is possible to motor to Vyas Sarovar on the Madras branch of the B.N. railway. The road passes through Chaibasa (16 m.), the headquarters of the district, and is metalled and bridged as far as the Baitarni river (52 m.), which forms the boundary between the district of Singhbhum and Keonjhar state. The Baitarni river is crossed by a fine bridge, and thence there is a good gravelled road passing through Keonjhar to Vyas Sarovar.

Chaibasa, the headquarters station of Singhbhum district, is situated about 16 m. to the S.E. A service of motor omnibuses connects it with Chakradharpur. Accommodation can be obtained at the D.B. at Chaibasa where there is a khansama. The country round Chaibasa is inhabited by the aboriginal race of Hos or Larka Kols. A great fair is held here in January, which is largely attended by the people of the district. Athletic sports, races, and national dances take place, and provide a good opportunity for seeing the aboriginal population.

1051 m. **Sini**. From here (a) the old line of the Bengal-Nagpur Railway runs N.E. to Asansol, on

the E.I.R., while (b) the new direct line runs E. to Kharakpur, 1151 m. (p. 442), and Howrah (1223 m.).

On (b), the line to Kharakpur, are the following stations :—

1068 m. **Kalimati**. Two m. N. of Kalimati, at Sakchi, are the huge iron and steel works of Tata's Iron and Steel Company, one of the largest industries in British India.

1084 m. **Galudih**. Two m. S. of Galudih station are the Rakha mines of the Cape Copper Company. Rich deposits of copper have been found in the hills visible from the railway, and the ore extracted is now concentrated and smelted near the mines.

On (a) the line to Asansol are the following stations :—

1068 m. **Chandil** station. Before this place is reached the hills again close in on the line. Dalma hill, 3407 ft. above sea-level, is seen 12 m. E. It is from the country about here that the labourers for the tea-cultivation in Upper Assam and Cachar are mainly recruited.

1102 m. **Purulia** station. The headquarters of the Manbhum district, through which the traveller has been passing for many miles. The place had, in 1911, 20,886 inhabitants, and has the usual offices of a civil station.

From here a branch line runs to

* **Ranchi** (73 m. W.), also a civil station, the headquarters of the Bihar-Orissa Government temporarily, and of the Chota-Nagpur division, 2100 ft. above the sea; population 32,994. There are two hotels: (1) Clayton's, (2) the R.H. of the B.N. Railway Station Committee. In the district are the Huardru waterfall, 24 m. distant,

and the Ichadag Sanatorium bungalow, 23 m. from the railway station.

Chota-Nagpur¹ is the seat of a Missionary Bishop of the Church of England. There are a handsome *Church*, *good Schools*, and a *Native Mission* in the town of Ranchi; and there are communities of *Christian Kols*, the result of extensive S.P.G. missions, conducted by a brotherhood from Trinity College, Dublin. The Roman Catholics, also, have an extensive mission at Ranchi (under the Archbishop of Calcutta with an Apostolic School, a High School, and Elementary Schools in about twenty villages; also a convent and boarding-school for girls.

1127 m. Adra station. Here the Kharakpur-Gomoh line of the B.N.R. system crosses the main line. An important junction station of the B.N.R.

1152 m. Asansol junction station (D.B. and Inspection Bungalow). About 6 m. before Asansol is reached the river Damodar (p. 100) is crossed on a very fine bridge. From Asansol to Calcutta, a distance of 132 m., the traveller proceeds by the East India Railway (see p. 54), this route being 60 m. longer than the Kharakpur route.

¹ For this interesting part of India Mr Bradley Birt's *Chota-Nagpur* may be consulted.

ROUTE 8.

KHANDWA to AJMER by Mhow, Indore, Nimach, Chitorgarh and Nasirabad, with expeditions by road to Unkarji and Mandu, and by rail to Udaipur.

353 m. **Khandwa** (p. 37) is the starting-point of the Rajputana-Malwa railway (metre gauge), which passes through Ratlam to Ajmer. Here the broad-gauge is changed for the narrower-gauge railway, commencing with the Holkar State Railway. At 38 m. **Mortakka** station, the Narbada river is crossed by a fine bridge, with a cart-road under the rails. There is a D.B. near the bridge, about 1 m. from the station, but inconvenient and without supplies; all provisions must be brought; tongas are available.

This neighbourhood abounds in large game of every sort.

A good cart-road of 6 m. leads E. to **Unkarji**, more properly Omkarji, a place well worth visiting. The trip will easily occupy a whole day, one night being spent at Mortakka.

The *Great Temple of Omkar* is situated in the island of Mandhata, in the Narbada. It is said that the island was originally called Baidurya Mani Parvat, but its name was changed to Mandhata as a boon from Siva to Raja Mandhatri, the seventeenth monarch of the Solar Race, who performed a great sacrifice here to that deity.

The area of the isle is about five-sixths of a sq. m., and a deep ravine cuts it from N. to S. At the N. the ground slopes gently, but terminates at the S. and E. in precipices 500 ft. high. At this point the S. bank of the Narbada is equally steep, and between the cliffs the river is exceedingly deep and full of crocodiles and large fish.

On both sides of the river, which is crossed by a public ferry, the rocks are of a greenish hue, very boldly stratified. It is said that the Temple of Omkar and that of Amreswar, on the S. bank of the river, are two of the twelve great temples which existed in India when Mahmud of Ghazni destroyed Somnath in 1024 A.D. During the wars of the 17th and 18th centuries the S. banks were deserted and overgrown with jungle; and when the Peshwa desired to repair the temple it could not be found, so a new one was built, with a group of smaller ones. Afterwards part of it was found, and the late Raja of Mandhata built a temple over it; but its sanctity and even its name have been appropriated by that which the Peshwa built.

The Raja of Mandhata, who is hereditary custodian of the temples, is a Bhilala, who claims to be the direct descendant of the Chauhan Bharat Singh, who took Mandhata from Nathu Bhil in 1765 A.D. The old temples have suffered from the Muhammadans, and every dome has been overturned and every figure mutilated. The gateways are finely carved. The oldest temple is that on the *Birkhala rocks* at the E. end, where devotees used to cast themselves over the cliffs up till the year 1824, when the custom was abandoned. The temple consists of a courtyard, with a veranda and colonnades supported by massive pillars boldly carved. On the hill are the ruins of a very fine *Temple to Siddesvara Mahadeva*, which stood on a plinth 10 ft. high. Round the plinth was a frieze of elephants 5 ft. high, carved in relief with remarkable skill on slabs of yellow sandstone; but all but two of the elephants are mutilated.

In front of the *Temple to Gauri Somnath* is an immense bull carved in a fine green stone, and 100 yds. farther is a pillar 20 ft. long. On

the island itself all the temples are Saivite, but on the N. bank of the Narbada are some old temples to Vishnu and a group of Jain temples. Where the river bifurcates are some ruined gateways, and a large building on which are twenty-four figures of Vishnu well carved in green stone. Among them is a large figure of the boar Avatar. On an image of Siva in the same building is the date 1346 A.D. Farther down the bank, in the Ravana ravine, is a prostrate figure, 18½ ft. long, with ten arms holding clubs and skulls. On its chest is a scorpion, and at its right side a rat, and one foot rests on a prostrate human figure.

The bed of the ravine is covered with huge basalt blocks slightly carved. The *Jain Temples* stand on an eminence a little back from the river. The largest is on a plinth of basalt 5 ft. high. The E. wall is still complete. On each side of the doorway is a figure with Saivite and Jain emblems curiously intermixed. The hills near these temples, as well as the island, are covered with remains of habitations.

A great fair is held at the end of October, attended by 15,000 persons. According to a prophecy—the fulfilment of which the Brahmans at Mandhata anxiously expect—the sanctity of the Ganges will expire in due course and be transferred to the Narbada.

41 m. from Khandwa (after crossing the Narbada) is *Barwaha* station (D.B.) the seat of a palace of His Highness the Maharaja Holkar (no admission). A metalled road runs from here (44 m.) to Maheshwar (D.B.) the old capital of the Holkar family, in Nimár, on the banks of the Narbada, where is the magnificent *Chhatra* of Ahalya Bai (died 1795) widow of the son of Malhar Rao Holkar. Sir John Malcolm says of this lady: "The character of

her administration was for more than thirty years the basis of the prosperity which attended the dynasty to which she belonged. She sat every day for a considerable period in open darbar transacting business. Her first principle of government appears to have been moderate assessment and an almost sacred respect for the native rights of village officers and proprietors of land. She heard every complaint in person, and although she continually referred causes to courts of equity and arbitration and to her Ministers for settlement, she was always accessible; and so strong was her sense of duty on all points connected with the distribution of justice, that she is represented as not only patient but unwearied in the investigation of the most insignificant causes when appeals were made to her decision. It appears, above all, extraordinary how she had mental and bodily powers to go through the labours she imposed upon herself, and which, from the age of thirty to that of sixty, when she died, were unremitted. The hours gained from the affairs of the State were all given to acts of devotion and charity, and a deep sense of religion appears to have strengthened her mind in the performance of her worldly duties. Her charitable foundations extend all over India, from the Himalayas to Cape Comorin, and from Somnath to the Temple of Jagannath in the East." Ahalya Bai is certainly the most distinguished female character in Indian history. It is recorded of her that she had the courage to watch her daughter become *sati*, after vainly seeking to dissuade her from this act.

58 m. from Khandwa is Choral station. From this point the ascent of the Ghat of the Vindhya Range commences and continues

almost into Mhow. The scenery is very fine. On approaching

71 m. Patalpani station, the waterfall of that name is passed.

74 m. Mhow station (R.), D.B. (13 m. from Indore), in the territory of the Maharaja Holkar, an important military Cantonment of British and Indian troops, headquarters of the Fifth Army Division, 1900 ft. above sea-level; population, 29,820. Troops are stationed here as provided in the Treaty of Mandasor of 1818. Mhow has no special interest for a traveller. The buildings and institutions are those common to all places where troops are stationed.

From Mhow an expedition of 55 m. may be made S.W. to the ruined city of Mandu, the ancient capital of the kingdom of Malwa. It is in the territory of the Raja of Dhar, and the best route is by motor to the town of Dhar (33 m.), D.B. A motor can pass right into the old fort and, except in the rains, as far as the palace of Baz Bahadur. If it is proposed to stay at Mandu, intimation should be given to the Diwan of Dhar State two days before, when the D.B. in Mandu will be made available. Motors can be hired in Mhow for the trip. A guide-book to the buildings can be purchased from the *tahsil* office in Mandu. It is quite possible, by motor, to see all the main buildings and return to Mhow the same day. Dhar is an old town of some historical and archaeological interest, containing several fine half-ruined mosques. On arriving at Mandu it is most convenient to drive right through the ruins to the furthest point close by the pavilion of Rupmati, then work back to the Barnes Kothi, an ancient building turned into a convenient rest-house (food and bedding must be brought) where if necessary the night can be com-

fortably spent. It is situated near the centre of the ruins. Outside the N. wall of the Lat Masjid, 1405 A.D., lies a lat, or pillar of wrought iron, thought to have been originally a pillar of victory. Jahangir in his diary stated that Bahadur Shah of Gujarat ordered it to be removed, but in this process it fell and broke in two: the smaller part, 13 ft. long, has disappeared; the larger part, 22 ft. long, remains *in situ*, partly buried in the ground. Two m. from Gujri (Inspection Bungalow) the Agra-Bombay road is left by a road running to Dhar (30 m.) and to Mandu (28 m.) At Manpur, 12 m. from Gujri, is the headquarters of the Political Agent in the Southern States of Central India.

Mandu¹ (1944 ft.), originally 37 m. in circumference, now occupies 8 sq. m. of ground, extending along the crest of the Vindhya; and is separated from the tableland, with which it is on a level, by a deep valley, above the Southern side of which the battlemented walls and gates of the old city rise very finely. Paths have been cut through the jungle to all the ruins of interest, the chief being the *Jami Masjid* (1454 A.D.), less injured than any of the others, and said to be the finest and largest specimen of Afghan architecture extant in India.² The courtyard is 90 yards sq. and is surrounded by a double colonnade. The mosque proper consists of five aisles of seventeen bays. To the W. of the mosque a second enclosure contains the fine white marble tomb of Hoshang Shah Ghorī. Facing the Eastern entrance to the mosque are the remains of the mausoleum

of Mohamed I. or II., and at its N.W. angle is the lower part of a circular tower of victory, formerly 7 storeys high. Between it and the great arched gateway in the Northern wall of the city are a number of ruined palaces and courts, including the *Jahaz Mahal*, or Ship Palace, which takes its name from the lakes between which it stands. It consists mainly of three great halls, with a beautiful little bath at the N. end: there is a fine view over the city from its roof. Close by is the *Hindola Mahal*, a hall of fine massive proportions. Further W. are the *Champa Baori*, a well with subterranean retreats for hot weather, and the remains of some baths. Two miles to the S.E. is the *Palace of Baz Bahadur*, Bayazid, the last king of Malwa, and on rising ground a short distance further stands the pavilion, of Rupmati, his wife. From here there is a splendid view Southwards across the Narbada valley, 1000 ft. below. S.W., near the inner citadel of Songarh in that quarter, is a quaint ravine with temples and a small tank, specially mentioned in the memoirs of the Emperor Jahangir. These once magnificent buildings are still, in their ruined state, very striking on account of their massive proportions. The fortifications were constructed by Hoshang Shah Ghorī, who reigned in the beginning of the 15th century, and in whose time the city attained its greatest splendour. In 1526 Mandugarh was taken by Bahadur Shah, ruler of Gujarat, and annexed to his dominions, of which it remained part until their conquest by Akbar in 1570. Of late years measures have been taken for the preservation of the most interesting ruins. Sir Thomas Roe, the Ambassador of James I. of England, entered Mandu in the train of Jahangir, part of the triumphal procession of the Great Mughal being 500 elephants. He complains in his *Memoirs* of the lions

¹ A most interesting account of the ruins of Mandu was published by the late Sir James Campbell in the Gujarat Volume of the *Bombay Gazette*; see also *Dhar and Mandu*, by Major C. E. Luard.

² See Fergusson, *Indian Architecture*, 2, 246.

which then infested the country, and killed one of his baggage ponies. The several Rulers of Mandu and Chitor were at feud with each other for many years. From June till November the locality is very unhealthy.

87 m. Indore station (D.B.). The capital of the State and residence of H.H. Maharaja Tukaji Rao Holkar III., Bahadur, born 1890; also of the Agent to the Governor-General for Central India.

Indore (population 77,928) stands on the banks of the rivers Sarasvati and Khan, on a wide plain 1738 ft. above sea-level. The site is healthy, and of recent years roads have been metalled, drains built, the water supply reorganised and the streets lighted.

The *Old Palace*, with its lofty many-storeyed gateway, faces the chief square. On the N. of it, and separated from it by a street are the *New Palace* and garden. On the S. side of the square is the *Ana Chuttra* (alms-house), where food is daily distributed to the poor.

In the streets are some good timber houses, with deep recessed verandas, and carved corbels and pillars. To the W. of the Old Palace is the *Sharafa Street* of the Marwari money-lenders, and close by are the *Haldi Bazar* and the *Aditwar* or Sunday Street, where a market is held on Sundays.

On the W. bank of the Khan, near the bridge, is a statue, of no artistic merit, of Sir Robert Hamilton; and on the riverside, and elsewhere in the city, are numerous Chattris erected to the memory of members of the Holkar family. The most important of these are on the Western outskirts of the town.

In the *Chattri Bagh*, an oblong enclosure surrounded by a battlemented wall, are the cenotaphs of Malhar Rao Holkar I. (died 1765) the founder of the dynasty, richly ornamented with sculpture in low relief; a smaller one of the cele-

brated Ahalya Bai (see pp. 123-4) died 1795, and one to her son Malhar Rao Holkar II. (died 1766): this is a twelve-sided building on a rectangular plinth also delicately ornamented with low relief sculpture. A similar walled enclosure a few hundred yards further down the Sarasvati contains the fine Chattri of Hari Rao Holkar IV.

Of modern buildings in the town the principal are the *King Edward Hall*, opened 17th November 1905, by King George V. (then Prince of Wales), whose visit is commemorated by the new *Courts of Justice*; the *M.R. Tukaji Rao Hospital*; and the *City High School*. There are also some flourishing cotton-mills.

S.W. of the town is the *Lal Bagh*, H.H.'s favourite palace, standing on the banks of the Sarasvati, amongst well-wooded gardens and grounds in which there are a house where lions are kept and an aviary. 1 m. from this palace is the *Manik Bagh Kothi*, where H.H. entertains visitors; another m. further (S. of the town) is the *Deer College* for preparing students for the University.

Adjoining the town, on the E., is the *British Residency*, an area assigned by treaty, and under British jurisdiction, containing the houses of the Agent to the Governor-General, the Resident, the Residency Surgeon and other members of the staff; the quarters of the British Guard and Indian Escort of the Agent; the *Post Office*; the *Anglican* and *R.C. Churches*; the *Presbyterian Church of Canada*; the *King Edward Hospital*, with 160 students (which occupies the buildings formerly devoted to Daly College (see below); and a beautiful *Park and Garden* through which flows the river Khan. Here also is *Daly College* for the education of Indian princes and nobles. It is a fine marble building with a large hall and contains a series of portraits of Indian princes by Herbert Olivier. There

are a branch of the Bank of Bombay and an Agency of Messrs Ralli Bros.

About 3 m. to the S.W. of Indore is the large new palace of *Shirpur*, begun by the late Maharaja and being completed by his son. In the same neighbourhood a large Black-buck preserve is maintained, and 1 m. beyond is Sukhnewas, a small pleasure palace surrounded by trees on the banks of a small lake.

In 1857 some of the State troops rose and attacked the Residency House, and also the Cantonment of Mhow on 1st July. The Resident, Colonel Durand, who had arrived at Indore only on 14th May, and the Europeans with him, were compelled, after a fight, to retire to Sehore and Hoshangabad. The Maharaja gave all the assistance he could and, in spite of the demands of his troops, refused to surrender a number of Christians to whom he had given sanctuary in the palace. Captain Hungerford, with the Maharaja's help, drove the mutineers off from Mhow and remained there until a Bombay force reached that place. Sehore is 56 m. from Dewas on the Agra-Bombay road, and is now the headquarters of the Political Agent in Bhopal: supplies obtainable.

112 m. from Khandwa is Fatehabad junction station (R.). From here a short branch line of 26 m. runs to

Ujjain (R.) (D.B.) (23 m. from Dewas, on the Agra-Bombay road, and 42 m. from Agar, which is garrisoned by a regiment of the Central India Horse). This famous city (the Greek *Ὀζώνη*) is situated on the right bank of the river Sipra, which falls into the Chambal after a total course of 120 m. Ujjain is in the dominions of the Maharaja Scindia of Gwalior, in Malwa, of which it was once the capital. It stands in N. lat. $23^{\circ} 11' 10''$, and is

the spot which marked the first meridian of Hindu geographers. It is said to have been the seat of the vice-royalty of Asoka during the reign of his father at Pataliputra, now Patna, about 263 B.C. It is, however, best known as the capital of the legendary Vikramaditya (Valour's sun), of Jain story, long believed to be the founder of the Samvat era. He was fabled to have driven out the Scythians, and to have reigned over almost all N. India, and at his court were said to have flourished the Nine Gems of Hindu literature—viz., Dhanvantari, Kshapanaka, Amarasinha, Shanka, Vetabhatta, Ghata-karpura, Kalidasa (of European celebrity), Varanruchi, and Varaha-mihira. Ujjain, as well as the whole province of Malwa, was conquered by Ala-ud-din Khilji, who reigned at Delhi 1295-1317 A.D. In 1387 A.D. the Muhammadan Viceroy, Dilawar Khan Ghorî, declared himself independent, and ruled from 1387 to 1405; he made Mandu his capital. In 1531 Malwa was conquered by Bahadur Shah, King of Gujarat, and in 1571 by Akbar. In 1658 the decisive battle between Aurangzeb and Murad and their elder brother Dara was fought near this city. In 1792 Jaswant Rao Holkar took Ujjain, and burned part of it. It then fell into the hands of Scindia, whose capital it was till 1810, when Daulat Rao Scindia removed to Gwalior.

In recent times, perhaps since the burning of 1792, Ujjain has somewhat changed its position. Scattered over the hills about 1 m. to the N. outside the present walls are a number of fine temples and other remnants of the ancient city. The modern city, which is oblong in shape and 6 m. in circumference, is surrounded by a stone wall with round towers, and on all sides by a belt of groves and gardens. The principal bazar is a spacious street, flanked by houses of two storeys, and having also four

mosques, many Hindu temples, and a palace of Maharaja Sindhia. Near the palace is an ancient gateway, said to have been part of Vikramaditya's fort. To the S.W. of this are the picturesque ghats and temples on the river; and outside the city to the S.E. are the remains of the Observatory, erected by Maharaja Jai Singh, of Jaipur (p. 192). 5 m. to the N. of the town is a picturesque Water Palace resembling some of those of Mandu.

161 m. Ratlam junction station (R. good) (D.B.) of the B.B. and C.I. Railway, main line from Bombay (*via* Baroda, Nagda, Kotah, Bharatpur and Muttra) to Delhi (mail route), and of the Rajputana-Malwa Railway (narrow gauge) section from Ajmer to Indore, Mhow and Khandwa junction on the G.I.P. Railway. Ahmadabad, 153 m., can be reached by the branchline, *via* Godhra and Anand, and Ujjain and Bhopal by the branch line from Nagda. Ratlam is also the capital of an Indian State and the residence of the Chief. It was founded by Ratan Singh, great-grandson of Udai Singh, Maharaja of Jodhpur. Ratan Singh was at the battle of Fatehabad, near Ujjain, in which Jaswant Rao Rathor, with 30,000 Rajputs, fought Aurangzeb and Murad, with the whole Mughal army. Tod (*Rajastan*, 2, 40), says: "Of all the deeds of heroism performed that day, those of Ratna of Ratlam by universal consent are pre-eminent." The palace in which the Prince resides is within the walls, and is a fine new building, with a handsome reception-room. There is a Chauk or square built by Munshi Shahamat Ali. Beyond this is the Chandni Chauk of the bankers, which leads to the Tripulia Gate, and the Amrit Sagar tank. An excellent metalled road connects Ratlam with Mhow, 78 m. Dhar, 90 m.; Mandu, 112 m.;

and Indore 72 m. Inspection Bungallows (without khansamas or supplies), with glass, crockery, knives, and forks, are situated at intervals of about 10 m.: one of these, at Sadalpur, is interesting as having been constructed from part of an old "water-palace." D.B.'s (with khansamas) are at Dhar, Mhow, and Indore.

181 m. Jaora, the capital of the Muhammadan State, so named, shows a palace and some fortifications.

213 m. Mandasor station. A fortified town remarkable as being the place where, in 1818, at the end of the Pindari War, a treaty was made between the British Government and Holkar. Severe fighting occurred here in 1857 between the rebels and a brigade of British troops moving from Mhow to relieve Nimach.

244 m. Nimach station * (R.), (D.B.), is a Cantonment of British troops. Nimach was about the most southerly place to which the mutiny extended. In 1857 the place was garrisoned by a brigade of native troops of all arms of the Bengal army. This force mutinied and marched to Delhi, the European officers taking refuge in the Fort, where they were besieged by a rebel force from Mandasor, and defended themselves gallantly until relieved by a brigade from Mhow. Some forty-two ladies and non-combatants found refuge at Udaipur.

278 m. from Khandwa is Chitorgarh * station. * (Branch line to Udaipur, 69 m.) The famous Fort¹ crowning the rocky ridge, on the E. of the line, is about 3 m. distant (2 m. to the foot; 1 m. ascent), and the road is very bad. Permission to visit the Fort must

¹ For a striking account of this wonderful Fort, see *The Nawabkha and Letters of Marqu*, both by Rudyard Kipling.

be obtained by letter beforehand from the local Magistrate (Hakim). He will provide an elephant for making the ascent of the rock or, if preferred, a rough tonga can be obtained. There is a small D.B. about $\frac{1}{2}$ m. from the railway station; by giving notice, food can be supplied. The Gambheri river below the famous fort is crossed by a massive old bridge of grey limestone, with ten arches, all of pointed shape, except the sixth from the W. bank, which is semicircular. The gateways and towers which existed at either end of the bridge have now disappeared. The builder is popularly said to have been Ajai Singh, son of Rana Lakshman, in whose reign Ala-ud-din Khilji besieged Chitor (1303 A.D.) on account of the beautiful Padmani, wife of the Rana's uncle, Bhim Singh. The first siege failed, though, according to tradition, Bhim Singh was treacherously captured for a time. When the second was about to prove successful in spite of the sacrifice of eleven royal Princes, each made Rana for one day, all the Rajput women proceeded to an underground cave, Padmani entering last, and were there immolated by fire (*johar*), and Bhim Singh and his clansmen fell before the swords of the Muhammadans.

When Chitor was the capital of Mewar the city was situated in the Fort. The modern town of Chitor, called the Talaiti or Lower Town, is little more than a walled village, with narrow, crooked streets, in front of the principal W. entrance to the Fortress.

The abrupt rocky hill, crowned by this magnificent Fort, rises 500 ft. above the surrounding country, and is a very conspicuous object, though its great length of $3\frac{1}{2}$ m. makes it look lower than it really is. The whole of the summit is covered with ruins of palaces and temples, and the slopes with thick jungle. An ascent 1 m. long, with two zigzags,

leads to the summit, and is defended at intervals by seven magnificent gateways, large enough to contain guard-rooms and even fine halls. They are the Pádál Pol, the newly rebuilt Bhairon or Tuta (Broken) Pol, the Hanuman Pol, the Ganesh Pol, the Jorla Pol, the Lakshman Pol, and the Main Gate, or Ram Pol.

Immediately outside the Pádál Pol, on the left, is an erect stone marking the spot where Bagh Singh, the chief of Deolia Partabgarh, was killed during the siege of Chitor by Bahadur Shah, of Gujarat, in 1535.

Between the "Broken" and the Hanuman gates there are on the right two chhatris marking the spots where the renowned Jaimal of Bednor and his clansman, Patta of Kailwa, were killed in Akbar's siege, in 1568. Jaimal, though only sixteen years of age, succeeded to the command of the place, which the Maharana Uday Singh had quitted, on the fall of the Salombra¹ chief; and so far was the heroism of the defenders carried that his bride fought beside him with a lance. He was shot by the Emperor Akbar himself, and 8000 Rajputs fell before the place was carried. The thirty-nine memorial stones here are much venerated, as if marking the shrine of some minor deity. After the final capture in 1568 Chitor was lost to the Rajput chief, who thereupon transferred his capital to Udaipur.

Facing the great gate is a pillared hall, used as a guard-house, and apparently of ancient construction. From the top of this hall, on which there are two four-pillared chhatris, a fine view of the plain is obtained.

The Ram Pol is a large and

¹ The Salombra Chief had the hereditary right to lead the van in the battle, and to command the Suraj Pol gate of the fortress when besieged. On all old grants the sign of the Salombra lance precedes the Udaipur monogram.

handsome gateway, crowned by a Hindu horizontal arch, in which the upper courses of either side, projecting inwards, overlap each other till they meet, or nearly so, and are then connected by an overlying slab. This is the construction of all the gateways on the ascent, except the Jorla, though in one, the Lakshman, the lower angles of the projecting courses are sloped off, giving the whole the outline of a regular pointed arch. Inside the gate, on each side, is a fine hall, supported on square-shaped and slightly-tapering antique pillars.

The principal objects of interest among the ruins of the old city are the two Jain Towers of Fame and Victory, known as the two Kirthams. The Tower of Fame, which is much the older, stands up grandly near the E. rampart, and is reached by the broad road turning to the left inside the Ram Pol, and passing the Kukreswar Kund and Palace of Ratna Singh, or by a path proceeding directly to the E. Mr Fergusson¹ thus describes it: "One of the most interesting Jaina monuments of the age (the first or great age of Jaina architecture, which extended down to about the year 1300, or perhaps a little after that) is the Tower formerly known as Sri Allata's (who ruled 953-972). It is a singularly elegant specimen of its class, about 75 ft. in height, and adorned with sculptures and mouldings from the base to the summit. An inscription once existed lying near its base, which is said to have given its date as 895 A.D., though the slab has now been lost. This, however, is much too early a date for the style of the structure. . . . The tower most probably belongs to the 12th century, and, it is said, was dedicated to Adinath, the first of the Jain Tirthankars. and nude figures of

them are repeated some hundreds of times on the face of the tower, distinguishing it as a Digambara monument. The temple in the foreground, S. side, is of a more modern date, being put together, partly, of fragments of older buildings, which have disappeared."

The tower consists of seven storeys, with an internal narrow and cramped staircase; the roof of the open top storey, which rests on pillars, was much damaged by lightning, but has been well restored. Fragments of an inscribed stone are on the ground under a tree just N. of the tower.

S. of the Tower of Fame the very ancient temple of Nilkantha Mahadeo is passed on the right, and the Suraj Pol, or Sungate, and its tanks on the left. A mile farther on is the Raj Tila or State hill, the loftiest point on the tableland; the broad road passes round this and returns N. by the Mori Tank, but walkers will probably cross from the E. gate to the palace of Rani Padmani-- a large and beautiful building overlooking a tank. From this or from the palace of her husband, Bhim Singh, Akbar carried off the famous gates now in the fort at Agra (p. 237). From near this point the road leads past the picturesque ruined palace of Jaimal to the Stambha, or Tower. Fergusson (*Indian Architecture*, 2, 59) calls it a *Kirtti* or *Jaya Stambha*, or Pillar of Victory; but epigraphic records speak of it simply as a *kirttistambha*, or Tower of Fame (and not of Victory). Fergusson says: "But a revival of Jaina architecture took place in the 15th century, especially under the reign of Kumbha, one of the most powerful of the kings of the Mewar dynasty, whose private capital was Chitor. His reign extended from 1428 to 1468, and it is to him that we owe the other of the two towers that still adorn the brow of Chitor.

. . . This one was erected to

¹ *Indian Architecture*, 2, 57

commemorate his victory over Mahmud Khalji, of Malwa, in the year 1440. It is therefore in Indian phraseology a *Kirtti* or *Jaya Stambha*, or Pillar of Victory, like that of Trajan at Rome, but in infinitely better taste as an architectural object than the Roman example, though in sculpture it may be inferior.

... It stands on a basement 47 ft. square and 10 ft. high, being nine storeys in height, each of which is distinctly marked on the exterior. A stair in the interior communicates with each, and leads to the two upper storeys, which are open, and more ornamental than those below. It is 30 ft. wide at the base, and 122 ft. in height, the whole being covered with architectural ornaments and sculptures of Hindu divinities to such an extent as to leave no plain parts, while at the same time this mass of decoration is kept so subdued that it in no way interferes either with the outline or the general effect of the pillar." The old dome was injured by lightning, and a new one was substituted by Sarup Singh, 1842-60. The stair is much wider and easier than that in the Jain tower (the small Kirtham), and in the inside are carvings of Hindu deities with the names below. In the top storey are two of the original four slabs with long inscriptions. The tower took seven to ten years to build—from 1458 to 1468. On the road at the corner of the lower platform is a square pillar recording a *sati* in 1468 A.D.

S.W. of the Tower of Fame is the Mahasati, a small wooded terrace, the prettiest spot on the hill, which was the place of cremation of the Ranas before Udaipur was founded. Below, on a low terrace, are the Gaumukh springs and reservoir. The springs issue from the cliff at places carved with a cow's mouth—hence the name. To the S.W. is a large carved stone temple, built by Rana Mukalji.

On the back of the wall is a huge carved head.

To the N. of the Tower of Fame rises the Temple of Vriji, built by Rana Kumbha about 1450—a massive building with a *Sikhara* (or tower) of unusually large proportions (see Fergusson, *Indian Architecture*, 2, 151). Hard by is a similar temple, built by his wife, the famous Mira Bai, of which the chief peculiarity is that the procession path round the cell is an open colonnade with four small pavilions at the corners. Between the Tower and the Ram Pol are the Nau Katha Magazine and Nau Lakha Bhandar, or Treasury, and on the wall connecting these is a small pavilion in which the Ranas of Chitor were formerly enthroned. From here the road traverses the old Moti Bazar to the Western Gate, and completes the circuit of the Fort

A branch line, 69 m., runs from Chitor to Udaipur (p. 128). Dabok, where Colonel Tod, the first Resident and author of the *Annals of Rajasthan*, lived, lies in ruins a few miles S. of Debari, 8 m. E. of the capital. The railway stops about 3 m. E. of the city of Udaipur. There is a good road from the station to the Udaipur Hotel, which lies just outside the N.E. corner of the city. Two full days, or more, can be well spent here.

About 2 m. before reaching the capital, the Arh river is crossed, with the old ruined town of that name on its banks. This stream collects the whole drainage of the Girwa, the natural outlet from which was dammed up with an immense masonry embankment by Maharana Udai Singh, and thus forms the Udai Sagar Lake (2½ m. by 1½ m.), the surplus waters from which, escaping, form the Birach river, which flows past Chitorgarh.

Udaipur (2034 ft. above sea-level) is the marvellously pictur-

esque capital of the State of Mewar, founded in the Christian era. The ruling family, now known as the Sesodia, and formerly as the Gehlot, is descended from the Suryabansi, or Sun-stock, royal dynasty of Oudh, and is the premier house of India in point of blue blood. The present representative is H.H. Maharaja-dhiraja Maharana Sir Fateh Singh Bahadur, G.C.S.I., G.C.I.E., G.C.V.O. The city of Udaipur was founded after 1568 by Maharana Uday Singh (who had been saved from being murdered as a baby by the devotion of his nurse, who substituted her own child), on the capture of Chitorgarh, which he left to its fate. The States of Udaipur, Jodhpur (Rathor), Jai-pur (Kachhwaha Chauhan), and Bundi (Hara Chauhan) are the four original great States of Rajputana. The rest are either derived from them or had their origin long subsequent to them.

The City (population about 50,000) is surrounded by a bastioned wall, which, towards the S., encloses several large gardens. The W. side is further protected by the beautiful Pichola lake, and the N. and E. sides by a moat supplied from the lake, while on the S. the fortified hill of Eklinggarh rises steep and rugged. The principal gateways are the Hathi Pol or "Elephant Gate," to the N.; the Kishan Gate, to the S.; the Suraj Pol, or "Gate of the Sun," on the E.; the Delhi Gate, on the N.E., and not far from the Hotel; and the Chand Pol, or "Moon Gate," on the W., opening on to the bridge across the N. end of the lake.

W. of the Hotel are the Residency and a mission house; E. is the Victoria Hall and Museum, with a statue of the Queen Empress; and $1\frac{1}{2}$ m. N.E., at Arh, is a fine group of royal cenotaphs. To the W. of the city is the Sujjangarh hill, 1100 ft. above the lake, with beautiful views of the lake

from it. The Sujjangarh Palace is a striking feature on the hill.

The main street of the city leads from the Hathi Pol (Elephant Gate) to the Maharana's palace, passing a clock tower and the Walter Hospital for Women, named after Colonel Walter, for many years Resident at Udaipur. The great Jagannath temple (built c. 1640), is approached by a fine flight of steps, with an elephant on each side at the head. The temple, though late in date, is a good example of the Indo-Aryan style, figured in book vi. chap. iv. of vol. 2 of Fergusson's *Indian Architecture*. The tower is ornamented by bold figured friezes and other architectural decoration. In front of the temple is a shrine with a brazen image of a Garuda. The Royal Palace (visible on application to the Private Secretary to the Maharana—without his permit only a few parts can be seen) is an "imposing pile of granite and marble, of quadrangular shape, rising at least 100 ft. from the ground, and flanked with octagonal towers, crowned with cupolas. Although built at various periods, uniformity of design has been well preserved; nor is there in the E. a more striking structure. It stands upon the very crest of a ridge, running parallel to, but considerably elevated above, the margin of the lake. The terrace, which is at the E. and chief front of the palace, extends throughout its length, and is supported by a triple row of arches, from the declivity of the ridge. The height of this arcaded wall is full 50 ft., and although all is hollow beneath, yet so admirably is it constructed that an entire range of stables is built on the extreme verge of the terrace, on which all the forces of the Maharana—elephants, cavalry, and infantry—are often assembled. From this terrace the city and the valley lie before the spectator, whose vision is bounded

only by the distant hills; while from the summit of the palace nothing obstructs the view over lake and mountain."¹

The entrance to the palace is through the Bari Pol (1600 A.D.), or Great Gate, containing the Royal drums, and by the inner Tripulia (1725 A.D.); between the two gates are eight carved arches or torans, under which various Maharanas have been weighed in the past against gold and silver, afterwards distributed in largesse. Beyond the Tripulia the Ganesh Deori gate leads S. to the fine old court known as the Rai Angan or Royal courtyard (1571 A.D.), adjoined on the E. side by the Jewel Room, and from this the visitor will be conducted over a number of palace enclosures—all picturesque, and some beautifully decorated. Of these the Chhoti Chitra Shali has brilliant mosaics of peacocks, the Manak (Ruby) Mahal is filled with figures of glass and porcelain, the Moti (Pearl) Mahal is decorated with mirrors, and the Chini ki Chitra Mahal (1711-34) has beautiful ornamentation of inlaid mirror work and fine tiles of Dutch and Chinese make; the Bari Mahal, or Amar Vilas (1699-1711), has a charming garden in the centre of it. On the W. side of the Tripulia are the Karan Vilas (1620-28 A.D.) and Khush Mahal buildings, while southwards lies the Shambhu Niwas Palace, to which the present Maharana has added yet another residence. The Pichola lake (2½ m. by 1½ m.) bounds the city and palaces on the W. side. Its embankment is reached through a series of beautiful gardens S. of the palaces, and now named the Sajjan Niwas; and from these a road runs past the Dudh Talai down the E. side of the lake to the Odi Khas, built by the late Chief at its Southern end for use as a

shooting-box. The feeding at this place of the wild pigs every evening affords a very curious sight. Beautiful as the lake is when seen from the palace and other points, the view on it near the S. end, with the marble-capped islands in the foreground and the lofty palace and city in the distance, is one of still greater loveliness. The Southern island is named the Jagmandar (1640 A.D.), and is chiefly notable for the Gul Mahal, a domed pavilion—most of the other buildings date from the 18th century. On it Prince Khurram, later Shah Jahan, lived when in revolt against his father, the Emperor Jahangir, and the refugee ladies from Nimach were protected in 1857 (p. 128). Farther N. is the Jagniwas Palace island (1740 A.D.), with the older Dilaram and Bari Mahal palaces, in beautiful gardens, and also, unfortunately, with a modern palace and villa; and beyond this again to the W. are two small structures in the lake. A number of state boats lie at the free disposal of visitors at the Niwas Bandar (reached by the last lane on the right when approaching the old palace from the main street of the city), and rowers are ready at hand; a gratuity at the end is alone customary. Visitors can land and be shown over the two islands, and can go to Odi Khas. By previous arrangement one way can be done by boat, the other by carriage. The view of the city and ghats and palaces from the bridge below the Gangour Ghat is also specially effective. This bridge is reached by diving into the slums to the W. of the main street; also by using a boat. N. of the Pichola lake is the fine Fateh Sagar constructed by the present Maharana. The foundation-stone of the great embankment was laid by the Duke of Connaught in 1889. It can be reached by the road going W. from the hotel, which winds among the hills and along two sides of the lake, and then crosses the

¹ *Handbook of Mewar*, by Mehta Fateh Lal, son of a Prime Minister of the Mewar State.

dam. Underneath the dam is the *Slaves' Garden*, well laid out. On the way back from this, the *Residency* is passed; also the *Mission-house*. A visit should be paid to the *Victoria Hall* and *Museum* with its statue of that Queen; also to the *Central Jail*, to see the carpet weaving and other industries.

Two m. E. of the hotel, on the road to the station, are the remains of the ancient city called Arh, or Ahar. Close by the Chhatris or cenotaphs of the Maharanas at Arh, containing the royal ashes, stand in what is called the Mahasati or royal place of cremation, which is enclosed by a lofty wall, and is adorned by many fine trees. The most remarkable are those of *Sangram Singh II.*¹ (1734), a large and beautiful structure, and of Amar Singh, grandson of Udai Singh (1616). Besides the modern village of Arh there are ruined temples of an older town.

Special arrangements are necessary to visit the *Great Lake at Kankroli*, or Rajnagar, called the Rajsamudra,² 35 m. to the N. of Udaipur. The retaining wall is of massive masonry, in many places 40 ft. high. The Band, or Ghat, is 1115 ft. long, with pavilions and torans, or ornamental arches, all of marble; behind is an embankment 35 yds. wide. It was erected (1660) as a famine work. On the S.E. side of the lake is the town of Kankroli, with a beautiful temple. There is a fair cart-track to this place. 14 m. N. of Udaipur in a bold ravine are the Eklingji lake and temple, a beautiful structure of white marble, sacred to the family deity of the Maharana. Near this, at Nagda, are two fine Jain temples, called the Sas Bahu, or Mother and Daughter-in-law.

The route to the Jaisamand lake, made at the end of the 17th century, and about 32 m. S.E. of

Udaipur, runs through a wild country; it is about 9 m. by 5 m., and is one of the most beautiful sights in India. The dam is 1000 ft. in length and 98 ft. in height. There is a fair road to it, which can be used by motor cars.

W. of the city is the Sujjangar hill, 1000 ft. above the Pichola lake, surmounted by a palace, from which a fine view can be obtained as a reward for an arduous ascent.

378 m. from Khandwa is Nasirabad station, D.B. (population 20,241), the military Cantonment for Ajmer, from which it can conveniently be visited by train, or by a picturesque road through some fine hills (14 m.). The station was originally laid out in 1818 by Sir David Ochterlony. Interest is attached to Nasirabad from the fact that when the mutiny broke out in 1857 the 1st Bombay Cavalry were compelled to remain neutral—though loyally inclined—as their families were at the mercy of the Bengal regiment, which mutinied and marched to Delhi.

Deoli, a small Cantonment of an Irregular Force, lying 57 m. S.E. of Nasirabad, may be reached by tonga, ordered from the latter place. The Kotah contingent stationed at Deoli in 1857 marched to Agra, but mutinied there. Twenty-five m. beyond Deoli is the picturesque city of Bundi (D.B.)—introduction to Political Agent, Kotah and Bundi, necessary.

393 m. from Khandwa is Ajmer junction station (see Route 10).

¹ See Fergusson's *Indian Architecture*, 2, 165.
² *Ibid.*, 184.

ROUTE 9.

ITARSI JUNCTION to JHANSI
by Bhopal, Sanchi, and Bina
(line to Saugor and to Baran and
Kota) and from Jhansi to

- (a) Kalpi and Cawnpore;
- (b) Datia, Gwalior, Dholpur, and
Agra, Muttra, and Delhi;
- (c) Orehha, Barwa-Sagar, Banda,
and Manikpur, with excursions
to Nowgong and Khaj-
raho.

Itarsi junction station, 464 m. from Bombay on the G.I.P. Railway (see p. 38). The line followed by this route is that of the Indian Midland, which is managed by the G.I.P. Railway; it formed the speediest route between Bombay and the N.W. of India until the Ratlam-Nagda-Muttra route (p. 169) was opened. Mail from Bombay to Cawnpore and to Agra, 24 hours, and to Delhi, Lahore, and Peshawar, 28, 38, and 52 hours respectively.

Fares to Delhi, Rs.66.4, Rs.33.3, and Rs.8.12.

12 m. Hoshangabad station (476 m. from Bombay, 481 m. from Delhi), D.B. (about a mile from the railway station), named after Hoshang Ghorī (p. 125). A town with population of 5503, and headquarters of a district. Passing this the railway crosses the Narbada (dividing Bhopal from British territory) on a fine bridge. About 4 m. N. of the Narbada river the well-wooded, picturesque ascent of the ghat commences, and at the top the line runs on the tableland of Malwa, with an average elevation of 1500 ft.

57 m. from Itarsi is Bhopal station (R.), D.B. near the railway station (branch to Ujjain). The town (population 56,204) stands on

the N. bank of a fine and extensive lake, $4\frac{1}{2}$ m. long and $1\frac{1}{2}$ m. broad, and is enclosed by a wall some miles in length. It is the capital of a Native State, under the Central Indian Agency, with an area of 6902 sq. m. Visitors who can obtain an introduction to H.H. the Begam can be comfortably entertained at the State Guest House—a handsome and well-appointed building situated on the edge of the beautiful lake. Carriages are always available for such visitors. Sanchi can be conveniently visited from Bhopal, and, if sufficient notice is given, elephants can be obtained for ascending the hill to the topes. The dynasty was founded by Dost Muhammad, an Afghan chief in the service of Aurangzeb, who took advantage of the troubles that followed the Emperor's death to establish his independence. His family have always shown their friendship for the British. In 1778, when General Goddard made his famous march across India, Bhopal was the only Indian State which showed itself friendly. In 1809, when General Close commanded another expedition in the neighbourhood, the Nawab of Bhopal applied to be received under British protection, but without success. The Nawab then obtained assistance from the Pindaris in the gallant struggle he maintained to defend himself against Scindia and Raghoji Bhonsla, in the course of which his capital underwent a severe but ineffectual siege.

In 1817 the British Government intervened and formed an alliance with the Nawab, who was, in 1818, guaranteed his possessions, by treaty, on condition of furnishing 600 horse and 400 infantry, to maintain which five districts in Malwa were assigned to him. He was soon afterwards killed by a pistol accidentally discharged by a child. His nephew, a boy, was declared his successor, and betrothed to his infant daughter,

but the Nawab's widow, Kudsia Begam, endeavoured to keep the government in her own hands, and she declared her resigned his claim to the throne and to the hand of the Nawab's daughter, Sikandar Begam, in favour of his brother Jahangir Muhammad. After long dissensions Jahangir Muhammad was installed as Nawab in 1837, through the mediation of the British. He died in 1844, when his infant daughter, Shah Jahan, was recognised as his successor, and Sikandar Begam, his widow, was made regent. After the mutiny of 1857 Sikandar was made the actual ruler, Shah Jahan becoming her apparent. Sikandar ruled till her death in 1868. Shah Jahan Begam ruled till 1901, and was succeeded by Her Highness Nawab Sultan Jahan Begam, G.C.S.I., G.C.I.E., C.I. The State maintains a force of regulars and irregulars, and the Imperial Service Cavalry, numbering 1878 of all ranks. The last named is commanded by Her Highness's second son, and is highly efficient. The regulars include sixty-two artillerymen, with four guns and fifty horses. A military band, forty-four strong, is trained to play European music. The State pays £13,000 to the British Government towards the upkeep of the force stationed at Sehore.

The name of Bhopal is said to be derived from that of its founder, Raja Bhoj, and the dam by which he formed the Tank, dam being in Hindi *pal*. Thus Bhojpal has been corrupted into Bhopal.

The *Palace of the Begam* is not of much architectural beauty, but is a large and imposing building. The *Citadel* walls afford a fine view of the lake and surrounding country. The *Jami Masjid* was built by Kudsia Begam, and the *Moti Masjid*, which somewhat resembles the Mosque at Delhi, by Sikandar Begam. The *Mint* and

Arsenal, and the *Gardens* of the Kudsia and Sikandar Begams also deserve a visit. Other objects worth seeing are the *Taj-ul-masajid*, commenced by Shah Jahan—when completed it will be the largest mosque in India; the King Edward Museum, opened by Lord Minto in 1909; the armoury in the Fatehgarh Fort (the Citadel); the very picturesque *Chauk* in the centre of the city; the Lady Lansdowne Hospital, and the club for *parda* ladies which was established by the Begam; the Alexandra High School for boys in the Be-nazir palace, the most picturesque building in Bhopal; the Sultania Girls' School in the Taj Mahal palace; the lines of the Imperial Service Cavalry, and the polo ground. The roads and main buildings are lit by electric light. The town waterworks were built by Kudsia Begam. Excellent rowing-boats are kept on both lakes. A drive to the Simla Kothi will well repay those who have time for it. The good shooting (big and small game) round Bhopal is not available without permission.

91 m. Bhilsa station. A fortified town in the Gwalior State. Population 7000. In the fort lies an old gun, 19½ ft. in length, with a bore of 10 in., said to have been made by order of the Emperor Jahangir. Bhilsa is now chiefly noteworthy as a famous place of Hindu pilgrimage to the temples, picturesquely situated in the bed of the Betwa river, and as giving its name to the remarkable and interesting series of Buddhist topes found in its neighbourhood.¹ The principal of these is at Sanchi.

¹ These are described in General Cunningham's *Bhilsa Topes*, 1 vol. 8vo. 1854; also in Fergusson's *Tree and Serpent Worship*. One half of this book and forty-five of its plates, besides woodcuts, are devoted to the illustration of the Great Tope. Casts of the E. gateway are in the South Kensington and Edinburgh Museums.

85 m. from Itarsi is Sauchi¹ (549 m. from Bombay, 408 m. from Delhi), the station before Bhilsa. There is a good D.B. of the Bhopal State near the station, and fast trains can be stopped here by the courtesy of the Traffic Superintendent at Bombay. The bungalow is furnished, and a khansama is kept; but travellers intending to halt here should take food and bedding with them, and give previous notice of their visit.

The monuments at Sanchi constitute the largest and most important of several groups of Buddhist monuments situated in the neighbourhood of the ancient city of Vidisa (near the modern Bhilsa) and often referred to as the "Bhilsa Topes." In contrast with other famous centres of Buddhism, such as Buddh-Gaya, Sarnath, or Sankisa, Sanchi had no connection with the life or acts of the Buddha; nevertheless its buildings are now the most magnificent and perfect examples of Buddhist architecture in India. Perhaps it was the interest taken in the spot by the great Emperor Asoka, who was to Buddhism what Constantine the Great was to Christianity, that accounts for the splendour of these structures. For one of the queens of Asoka, Devi by name, came from Vidisa; and it was on the hill of Sanchi, then known as Chetiya-giri, that a monastery is said to have been built for his son Mahindra. Whether this story is true or not, the fact remains that the earliest buildings here date from the time of Asoka, and that that Emperor is commemorated here more than anywhere else in India.

The majority of the monuments which are now exposed to view

have recently been excavated by Sir John Marshall on behalf of the Bhopal Darbar, and much has been done to rescue the remainder from the ruin into which they had fallen and to preserve their fabrics and beautify their surroundings. Most of them are situated on a plateau on the hilltop, which in later mediæval times—that is about 1100 A.D.—was enclosed by a circuit wall of solid stone construction. The buildings on this plateau divide themselves naturally into four classes; namely: Firstly, the *stupas*, or, as the Burmese would call them, *pagodas*, which were erected either to enshrine the relics of the Buddha or of one of his saints, or to commemorate some specially holy spot; secondly, the memorial pillars set up by the Emperor Asoka or by other devotees in later ages; thirdly, the chapels or *chaitya* halls in which the faithful met together for their prayers and the shrines of mediæval date in which images of the Buddha were set up; and fourthly, the monasteries or convents in which the monks and nuns lived side by side.

Of the *stupas* on the hilltop there are many scores, ranging in date from the 3rd century B.C. down to the 12th century A.D., and in size from the Great Stupa, with its vast imposing dome, down to miniature votive *stupas* no more than a foot in height. Each one of them was set up by the pious Buddhists as a work of merit which would help the donor a step nearer to his goal. As it now stands, the Great Stupa consists of an almost hemispherical dome truncated near the top and surrounded at its base by a lofty terrace. On the berm of this terrace and round about its foot were two procession paths (*pradakshina patha*); and each of these was enclosed by a balustrade of stone, while on the summit of the dome was a third balustrade surrounding the sacred umbrella which invariably crowned these

¹ General Maisey's *Sanchi and its Remains* (1850-51), published in 1892, and a selection of photographs published under the orders of Sir Lepel Griffin, K.S.C.I., when Agent to the Governor-General for Central India, contain some illustrations of the tope and its sculptures.

monuments, and which was an emblem of the royalty of the Buddha—the Universal Monarch. But the crowning beauty of this monument is the richly carved gateways or *toranas* which front the entrances between the four quadrants of the rail and constitute a most striking contrast with the massive simplicity of the structure behind. All four gateways are of similar design—the work of carpenters rather than of stone masons—and the marvel is that erections of this kind, constructed on principles wholly unsuited to work in stone, should have survived in such remarkable preservation for nearly 2000 years. The best preserved is the Northern one, which still retains most of its ornamental features and enables the visitor to reconstruct in his mind's eye the original appearance of them all. Each gateway was composed of two square pillars surmounted by capitals, which in their turn supported a superstructure of three architraves with volute ends, ranged one above the other at intervals slightly in excess of their own height. The capitals were adorned with standing dwarfs or with the forefronts of lions or elephants set back to back in the Persepolitan fashion; and springing from the same abacus and acting as supports to the projecting ends of the lowest architrave, were Caryatid figures of graceful and pleasing outline. Other images of men and women, horsemen, elephants and lions were disposed between and above the architraves, while crowning and dominating all was the sacred wheel, so inseparably connected with Buddhism, flanked on either side by attendants and *triratna* emblems. For the rest, both pillars and superstructure were elaborately enriched with bas-reliefs illustrative of the *jataka* legends or scenes from the life of the Buddha, or of important events in the subsequent history of the Buddhist

religion. The inscriptions carved here and there on the gateways record the names of pious individuals or of guilds who contributed to their erection, but say not a word of the scenes and figures delineated, the interpretation of which has been rendered all the more difficult by the practice, universal in the Early School, of never portraying the Buddha in bodily form, but of indicating his presence merely by some symbol, such as his footprints, or the throne whereon he sat, or the sacred tree associated with his enlightenment. The reliefs are too numerous to be described at length, but those on the front façade of the **East Gateway** may be taken as typical of the rest. On the right pillar are represented, in six panels, the six *devalokas* or stages of the Buddhist Paradise, their respective deities seated like mortal kings in each. On the left, starting from the base, is Bimbisara, with his royal cortège issuing from the city of Rajagriha on a visit to the Buddha, here symbolised by his empty throne. This visit took place after the conversion of Kasyapa, and in the panel above is depicted one of the miracles by which Buddha converted the Brahman ascetic. The Nairanjana river is shown in flood with Kasyapa and two of his disciples hastening in a boat to the rescue of Buddha. Then, in the lower part of the picture, Buddha, represented again by his throne, appears walking on the face of the waters, and in the foreground the figures of Kasyapa and his disciples are repeated, now on dry ground and doing homage to the Master. The third panel portrays the temple at Buddh-Gaya, built by Asoka, with the throne of Buddha within and, spreading through its upper windows, the branches of the sacred tree. It is the illumination of Buddha; and to right and left of the temple are four figures in an attitude of prayer—perhaps the Guardian Kings of the four quar-

ters; while ranged above in two tiers are groups of deities looking on in adoration from their celestial paradises. The scenes on the lintels are still more elaborate. On the lowest we see, in the centre, the temple and tree of Buddh-Gaya; to the left, a crowd of musicians and devotees with water vessels; to the right, a royal retinue and a king and queen descending from an elephant, and afterwards doing worship at the tree. This is the ceremonial visit which Asoka and his queen Tishyarakshita paid to the Bodhi tree, for the purpose of watering it and restoring its pristine beauty after the evil spell which the queen had cast upon it. The middle lintel is occupied with the scene of Buddha's departure from Kapilavastu (*Mahabhinish-kramana*). To the left, is the city with wall and moat, and issuing from its gate the horse Kanthaka, his hoofs supported by Yakshas and accompanied by the divinities in attendance on the Buddha, and by Chandaka, his groom, who holds the umbrella symbolical of his Master's presence. In order to indicate the progress of the Prince, this group is repeated four times in succession towards the right of the relief, and then, at the parting of the ways, we see Chandaka and the horse sent back to Kapilavastu and the further journey of Buddha indicated by his footprints surmounted by the umbrella. Lastly, in the topmost lintel, are representations of the seven last Buddhas, the first and last symbolised by thrones beneath their appropriate Bodhi trees, the rest by the *stupas* which enshrined their relics.

Descriptions of the other gateways have been given as follows:—

North Gateway. Pillars surmounted by elephants and riders. *Right pillar*—front face: Staircase and Buddhist railing. Inner face: Worship of tope and trees,

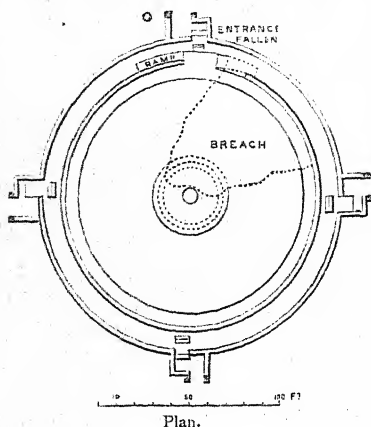
monkey worshippers in one scene. *Left pillar*—front face: Worship of tree, procession, scenes at fountain. Inner face: Cave temple, procession, tree worship. The *Architraves* bear scenes of processions with chariots, tree worship, and dagoba worship, and on the back of giants' and of hermits' huts. The floral patterns on the outer sides of these pillars are noticeable.

South Gateway.—Pillars surmounted by four lions. *Left pillar*—front: Casket scene in palace, worship of topes, siege, and relic procession. *Architraves*—Siege of a city. The right pillar of this gate has not been found.

Western Gateway.—Pillars surmounted by four dwarfs. *Right pillar*—front: Trial of the bow, tree worship. Back: Worship of trees, one under an umbrella. *Left pillar*—front: Love scenes. Back: Hermits, tree festival, boat scene. *Architraves*—front: Procession with relic-casket, worship of symbol and trees. Back: Worship of topes and temple, triumphal procession.

The Great Stupa, or Tope, at Sanchi, anciently called Chaitya giri, the Chapel Hill, and the ruined buildings surrounding it are, as stated, situated on a level platform upon the top of the hill, which is about 350 ft. above the plain, and is approached by an easy path. The Tope with its rail and gateways were carefully and satisfactorily restored in 1883. They now form one of the most picturesque as well as one of the most interesting monuments of India. The dome, which is 42 ft. high and 106 ft. in diameter, rises from a plinth of 14 ft.; this is surmounted by a terraced path, reached by steps on the S. side, used by worshippers for the perambulation of the Tope and the relic buried in it. The Tope was

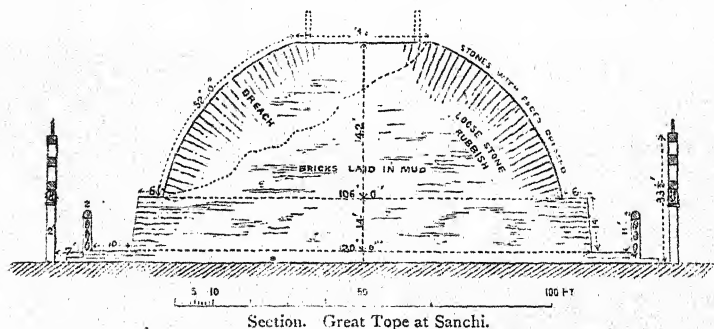
crowned by an altar or pedestal surrounded by a rail, and must once have been nearly 100 ft. high, but these have not been restored; the pillars of the rail will be



noticed on the ground at the N.E. side of the level platform. The

let into them; a rounded coping stone surmounts the whole. At each cardinal point the railing is broken by a splendidly-decorated gateway 18 ft. high and 7 ft. broad, crowned by a superstructure of three stages of cross-beams, surmounted by a wheel and other Buddhist emblems; facing each gateway, with its back to the wall of the plinth, is a large seated statue, probably representing the four last Buddhas. The faces of the pillars of the gateways and of the cross-beams are elaborately carved with a series of most interesting scenes, the principal of which have been described.

It used to be thought that the Great Stupa, as it stands, was erected at the same time as the column near the Southern Gateway—that is, during the reign of the Mauryan Emperor Asoka in the third century B.C., and it used also to be thought that the balustrade around its base was approximately contemporary with the body of the building; and that



Tope was enclosed below at a distance of 9½ ft. from it by a great railing slightly elliptical in shape, the diameter from W. to E. being 144 ft. and from N. to S. 151 ft. The railing is formed of pillars nearly 10 ft. high, carrying three bars, each 2 ft. 2 in. long, and separated by an interval of 3 in.,

the four gateways were erected in the course of the 2nd century B.C. This chronology, however, has now proved erroneous. The *stupa* which Asoka built was a structure of brick of about half the dimensions of the present *stupa*; and it was not until a century or more later that this original brick edifice

was encased in stone and so brought to its present size, or that the balustrade was built around its base; and it was not until two centuries later that the four gateways were erected. The column of Asoka referred to, though now shattered and in pieces, is well worthy of attention. On its broken stump the visitor can still trace out the edict written in the early Brahmi characters in which the Great Emperor exhorted the Buddhists to avoid schisms in their church; and the lions on the capital, with their swelling veins and tense muscular development, afford a fine example of what Græco-Persian art was achieving in India during the Maurya age.

Of the other *stupas* on this site two are specially remarkable. One of them (No. 3) stands about fifty yards to the North-east of the Great Stupa and is of almost identically the same design but of smaller proportions. The dome and railings have recently been reconstructed, and from it the visitor can now obtain a fair idea of the ancient appearance of these monuments, though, to render the mental picture complete, he must bear in mind that the surface of the monuments was once coated with stucco; that moulded in relief on this stucco were great swags or garlands encircling the dome; and that gold and brilliant colours were used to pick out the decorations, if not to embellish the whole body of the building. It was in this *stupa* that the relics of the two famous disciples of the Buddha—Sāriputra and Mahāmogallāna—were discovered, and in old days it must have been invested with peculiar sanctity. The chamber in which the relics were found was set in the centre of the structure and on a level with the top of the terrace. It contained two stone boxes, each bearing a short inscription: on one the word *Sāriputasa* "of Sāriputra," and on the other *Mahāmogallānasa* "of Maha-

mogallāna"; and inside each of the boxes was a casket of steatite containing some small fragments of human bone and a variety of beads of pearl, garnet, lapis-lazuli, crystal and amethyst.

The other *stupa* stands on a ledge of rock half-way down the Western side of the hill, and is of about the same size as the one just described. Here there is no gateway but, on the other hand, the railing around the base is almost intact and exhibits a variety of most interesting reliefs of the primitive Indian school, which present a striking contrast with the more advanced art of the gateway sculptures. What is especially striking about these reliefs is the extraordinarily crude treatment of living figures coupled with the no less extraordinary power of decorative design. The Indian artist has always possessed an innate aptitude for the handling of ornamental and particularly of floral patterns, but it was not until Greek influence made itself felt in the North-west of India that he learnt how to portray the human figure. This is well illustrated by a comparison of the majority of the reliefs with a few of markedly superior execution, but lacking decorative power, which were added at a later date.

Of the shrines and monasteries the most noteworthy is the *chaitya* hall (Temple No. 18), which stands directly opposite the South entrance of the Great Stupa, and which is specially interesting to the antiquarian as one of the few examples of structural edifices of this type. But apart from this mere academic value the visitor will find a wonderful charm in the classic-looking columns of the nave which transport the memory back to the pillared aisles of Paestum or of Athens; and he will not fail to mark the resemblance between its rounded apse and the apses of our own early Christian churches. The pillars and walls of this chapel that

are now exposed to view date back no farther than the 7th century of our era, and the sculptured jamb of the porch which lies prostrate in front of the door is more modern still by three or four centuries; but beneath the floor of the temple are the remains of three older chapels which successively occupied the same site, but, being constructed of wood, perished one after another before the existing edifice was built.

Another structure which recalls the classic temples of Greece, is a little shrine a few paces to the East of the one just described. It is a very unpretentious building, consisting of a simple flat-roofed chamber with a pillared porch in front; but, despite its modest size, it is very characteristic of the age of India's "Renaissance," when art and thought alike found expression in the same intellectuality, in the same purposefulness, and in the same logical definition as the art and thought of Greece did eight centuries earlier, and of Italy more than a thousand years later. To the South of this shrine is a lofty plinth supporting the stumps of numerous octagonal columns. Originally it was an apsidal *chaitya* hall, with a superstructure of wood, but the superstructure was burnt down about the beginning of the Christian era and the plinth was then enlarged and stone substituted for wood. Many of the columns bear *ex-voto* inscriptions in the early Brahmi characters.

Of the fourth and last class of monuments on this site—namely the residence of monks and nuns—there are five examples, and they range in date from the 4th to the 11th century of our era. The earlier ones, which once occupied the Eastern side of the plateau, were built of wood and have perished or been buried beneath the foundations of later structures. Those which have survived are all built more or less on the same plan

—the plan of the ordinary domestic house of ancient India—with a square open court in the centre and ranges of two-storeyed chambers on the four sides. The most interesting, as well as the most modern among them, is the one occupying the highest part of the plateau towards the West. Here are the remains of several courts, surrounded by monastic cells, and on the Eastern side of what was evidently the principal court is a lofty shrine, containing an image of the Buddha, seated in that familiar attitude beneath the Bodhi tree, when touching the earth with his right hand he called on her to bear witness for him against Mara, the Evil One. Nine out of ten visitors imagine that this shrine is not Buddhist at all but Hindu, for its style is precisely that of a Hindu temple of the late mediæval period, and, were it not for the statue of the Buddha in the sanctum and some of the images in the niches round its outer walls, there would be nothing to indicate its Buddhist character. The reason for this is that by the 11th century Buddhism had come deeply under the influence of Hinduism, and this influence made itself manifest in many new doctrines and ideas, which it absorbed from the parent religion, as well as in the more superficial matter of its architecture.

Close to the S. gate are the remains of a fine pillar nearly 40 ft. high, which carried a bell-shaped capital of four lions back to back; another stood near the Northern gate. On the platform will be observed many interesting sculptures and remains, including a huge stone bowl. To the S. of the Tope are the ruins of the only structural *chaitya* chapel known to exist; the colonnade of the nave and apsidal end can be clearly recognised.

To the W. a path descends steeply to the smaller tope near

the foot of the hill ; this also has a very interesting railing, $7\frac{1}{2}$ ft. high, with carved medallions on the pillars and well-sculptured scenes on the gateways, and should be visited on the way back to the rest-house. In it were found relics of Kasyapa and Mogaliputra, well-known Buddhist apostles in the 3rd century B.C.

The country for some distance round is studded with Buddhist remains, but only at Sanchi itself are the remains abundant and well preserved. Sanchi is referred to by the Chinese pilgrim Fa-Hian in his description of the great kingdom of "Sha-chi."

Besides the group at Sanchi, there is at *Sonari*, 6 m. off, a group of eight topes, of which two are important structures in square courtyards, and in one of these numerous relics were found. At *Sadhara*, 3 m. farther, is a tope 101 ft. in diameter, which yielded no relics, and one 24 ft. in diameter, in which were found relics of Sariputra and others like those found at Sanchi. At *Besnagar*, near Bhilsa (an ancient city extending from the junction of the Betwa and Bes rivers as far S. as Udayagiri Hill and E. to the Lohanggi Rock of Bhilsa), was lately found a column referring to the Græco-Bactrian King Antialkidas, of the date of 140 B.C.

At *Bhojpur*, 7 m. from Sanchi, are thirty-seven topes, the largest 66 ft. in diameter, and in the next to it important relics were found. At *Andher*, 5 m. W. of Bhojpur, is a group of three small but very interesting topes. "So far as can be at present ascertained," says Fergusson,¹ "there seems no reason for assuming that any of them are earlier than the age of Asoka, 250 B.C., nor is it probable that any of them can be of later date than, say, the 1st century before our era."

143 m. from Itarsi is Bina junction (R.).

Hence a line runs N.W. to 73 m. Goona, 147 m. Baran, and 188 m. Kotah (p. 169), on the new direct route between Bombay and Delhi, controlled by the Bombay Baroda and Central Indian Railway, and another 165 m. S.E. to Katni on the E.I.R. (p. 40), past Saugor and Damoh. 8 m. from Bina, at Eran, are some Jain and Buddhist ruins, including two lats or monolithic pillars.

47 m. from Bina junction is Saugor (D.B.). Principal town and headquarters of Saugor district, Central Provinces, and a military Cantonment. Population 45,938. Saugor stands 1940 ft. above sea-level, on the borders of a fine lake (*Sagar*), nearly 1 m. broad, from which it derives its name. The lake is said to be an ancient Banjara work, but the present city dates only from the end of the 17th century, and owes its rise to a Bundela Raja, who built a small fort on the site of the present structure in 1660, and founded a village called Parkota, now a quarter of the modern town. During the mutiny of 1857 the town and fort were held by the English for eight months, until the arrival of Sir Hugh Rose. During that time the whole of the surrounding country was in the possession of the rebels.

Saugor town is well built, with wide streets. The large bathing-ghats on the banks of the lake, for the most part surrounded with Hindu temples, add much to its appearance.

The existing *Fort* at Saugor was completed by the Maharrattas about 1780. It stands on a height N.W. of the lake, commanding the whole of the city and surrounding country, and consists of twenty round towers, varying from 20 ft. to 40 ft. in height, connected by thick curtain walls. It encloses a space

¹ *Indian Architecture*, 1, 71.

of 6 acres, for the most part covered with old Mahratta buildings two storeys high. In 1862 an unhealthy swamp lying N.E. of the lake, which cut off the quarter called Gopalganj from the rest of the city, was converted into a large garden with numerous drives and a piece of ornamental water.

A Cavalry School was started at Saugor in 1910, but has been closed during the War. The course for British officers lasted from the beginning of September to the end of April. A military wireless telegraphy centre is also to be established here in the near future.

The Police Officers' Training School, at which sub-inspectors of police are trained, was started in 1906, and is located in the fort.

182 m. from Itarsi is Lalitpur station (D.B.), 57 m. from Jhansi. It is the chief town and the administrative headquarters of the Lalitpur subdivision of the Jhansi District. Population 12,449.

207 m. Talbahat station. Population 6433. There is an Inspection House. A picturesque town with a large piece of artificial water covering more than 1 sq. m. The water is retained by damming the streams that flow through a rocky barrier about 800 ft. high.

238 m. from Itarsi is Jhansi junction station (R., D.B.), centre of the Indian Midland Railway system. The main line runs N. to Gwalior, 61 m., and Agra, 134 m., one branch N.E. to Cawnpore, 137 m., and another E. through Banda, 119 m., to the E.I. Railway at Manikpur (p. 41), 181 m.

By road Jhansi to Saugor (D.B.) is 122 m., a fair motoring road. The Betwa river is crossed at 24 m. from Jhansi by a ferry. Jhansi to Banda is 122 m., *via*

Nowgong 65 m. Jhansi to Sipri (W.) is 61 m. by a metalled road. Sipri is the summer headquarters of the Gwalior State administration. Jhansi to Gwalior is 61 m., to Dholpur 103 m., to Agra 138 m. Suitable for motors. Petrol can be obtained from the Bundelkhand Motor Agency in the Sadr Bazar.

Jhansi (lat. 25° 27', long. 78° 37', population 70,191) is one of the main halting-places for troops proceeding up country. It is well worthy of a visit on account of its fort, which the British Government have obtained, in 1885, in exchange with Maharaja Sindhia for Gwalior; and on account of the various places of interest—Datia, Orchha, Barwa Sagar—which can be reached from it.

The Province of **Bundelkhand**, in which Jhansi is situated, was for ages one of the most turbulent and difficult to manage in all India. In the early part of the 17th century the Orchha State was governed by Bir Singh Deo (1605-26), the most famous of its Chiefs, who built the fort of Jhansi, 8 m. to the N. of his capital, which is situated on an island in the Betwa river. He incurred the heavy displeasure of Akbar by the murder of Abul Fazl, the Emperor's favourite Minister and historian, at the instigation of Prince Salim, afterwards known as the Emperor Jahangir. A force was accordingly sent against him in 1602; the country was ravaged and devastated, but Bir Singh himself contrived to escape. On the accession of his patron, Salim, in 1605, he was naturally pardoned, and rose into great favour; but when, on the death of that Emperor in 1627, Shah Jahan mounted the throne, Bir Singh revolted. His rebellion was unsuccessful, and although he was

permitted to keep possession of his dominions, he never regained all his former power and independence. During the troubled times which succeeded Orchha was sometimes in the hands of the Muhammadans and sometimes fell under the power of Bundela Chieftains. In 1732 Chatar Sal found it expedient to call in the aid of the Mahrattas, who were then invading the Central Provinces under their Peshwa Baji Rao I. They came to his assistance with their accustomed promptitude, and were rewarded on the Chief's death, in 1734, by a bequest of one-third of his dominions. The territory so granted included portions of the modern division of Jhansi, but not the existing district itself. In 1742, however, the Mahrattas found a pretext for attacking the Orchha State and annexing it amongst other territories. Their General founded the city of Jhansi, and peopled it with the inhabitants of Orchha.

The district remained under the rule of the Peshwas until 1817, when their rights passed to the E.I. Company. Under British protection, native Rajas ruled until their folly and incompetency ruined the country, and, when the dynasty died out on the death of Gangadhar Rao, in 1853, their territories lapsed to the British Government. The Jhansi State, with Jalaun and Chanderi districts, were then formed into a Superintendency, while a pension was granted to the Rani, or widow, of the late Raja Rao. The Rani, Lakshmi Rai, however, considered herself aggrieved, both because she was not allowed to adopt an heir, and because the slaughter of cattle was permitted in the Jhansi territory.

The events of 1857, accordingly, found Jhansi ripe for rebellion. In May it was known that the troops were disaffected, and on the 5th of June a few men of the

12th Native Infantry seized the fort, containing the treasure and magazine. Many European officers were shot the same day. The remainder, who had taken refuge in a fort, capitulated a few days after, and were massacred with their families to the number of sixty-six persons, in spite of a promise of protection sworn on the Koran and Ganges water. The Rani then attempted to seize the supreme authority, but the usual anarchic quarrels arose between the rebels, during which the Orchha leaders laid siege to Jhansi and plundered the country mercilessly. On the 4th of April 1858 the fort and town were captured by Sir Hugh Rose, who marched on to Kalpi without being able to leave a garrison at Jhansi. After his departure the rebellion broke out afresh, only the Gursarai Chieftain in the N. remaining faithful to the British cause. On the 11th August a flying column under Colonel Liddell cleared out the rebels from Mau (39 m. from Jhansi), and, after a series of sharp contests with various guerilla leaders, the work of reorganisation was fairly set on foot in November. The Rani herself had previously fled with Tantia Topi, and finally fell in a battle at the foot of the rock fortress of Gwalior.

The siege of Jhansi occupied Sir Hugh Rose's army from 21st March till 4th April 1858, and cost 343 in killed and wounded, of whom 36 were officers. The engineers lost four officers leading the attacking parties at the final escalade. Col. Malleeson, quoting Sir Hugh Rose, gives the following description of Jhansi at the time of the investment :—

"The great strength of the Fort of Jhansi, natural as well as artificial, and its extent, entitle it to a place among fortresses. It stands on an elevated rock, rising out of a plain, and commands the city and surrounding country. It is built of excellent and most massive

masonry. The fort is difficult to breach, because composed of granite; its walls vary in thickness from 16 ft. to 20 ft. It has extensive and elaborate outworks of the same solid construction, with front and flanking embrasures for artillery-fire, and loopholes, of which in some places there were five tiers, for musketry. On one tower, called the 'white turret,' since raised in height, waved in proud defiance the standard of the high-spirited Rani. The fortress is surrounded on all sides by the city of Jhansi, the W. and part of the S. face excepted. The steepness of the rock protects the W.; the fortified city wall springs from the centre of its S. face, and ends in a high mound or mamelon, which protects by a flanking fire its S. face. The mound was fortified by a strong circular bastion for five guns, round part of which was drawn a ditch, 12 ft. deep and 15 ft. broad, of solid masonry.

"The city of Jhansi is about $4\frac{1}{2}$ m. in circumference, and is surrounded by a fortified and massive wall, from 6 ft. to 12 ft. thick, and varying in height from 18 ft. to 30 ft., with numerous flanking bastions armed as batteries, with ordnance and loopholes, and with a banquette for infantry. The town and fortress were garrisoned by 11,000 men, composed of rebel sepoys, foreign mercenaries, and local levies, and they were led by a woman, who believed her cause to be just."

The fort has been modernised and supplied with strong armament. The views from the top and from the road round the ramparts are very extensive. A crag to the N.E. of the railway station, still called "Retribution Hill," marks the last stand made by the mutineers.

The old civil station (Jhansi Nauabad) attached to Jhansi before 1861 remains the headquarters of the district.

- (1) *Jhansi to Cawnpore* direct, 137 m. Jhansi to Cawnpore *via* Hamirpur is 197 m. by road.

Between Jhansi and Cawnpore the country abounds in black buck. Numerous old fortified villages are seen from the railway train.

309 m. from Itarsi is Orai station (R., D.B., food available). A thriving place of 9151 inhabitants, and the headquarters of the Jalaun district.

330 m. from Itarsi is Kalpi station (D.B. $2\frac{1}{2}$ m. distant. Permission to occupy has to be obtained from the District Engineer, P.W.D., Orai, and visitors have to arrange for their food and servants). The town is situated amongst deep rugged ravines on the right bank of the Jumna, which is here crossed by a fine iron girder bridge of ten spans of 250 ft. The piers are about 60 ft. in height, built on wells sunk 100 ft. below low water level. Population 10,568.

Tradition says that the town was founded by Basdeo or Vasudeva, who ruled at Kamba from 330 to 400 A.D. During the Mughal period Kalpi played so large a part in the annals of this part of India that it would be impossible to detail its history at length. After the Mahrattas interfered in the affairs of Bundelkhand the headquarters of their Government were fixed at Kalpi. At the time of the British occupation of Bundelkhand, in 1803, Nana Gobind Rao seized upon the town. The British besieged it in December of that year, and, after a few hours' resistance, it surrendered. Kalpi was then included in the territory granted to Raja Himmat Bahadur, on whose death, in 1804, it once more lapsed to Government. It was next handed over to Gobind Rao, who exchanged it two years later for villages farther to the W. Since that time Kalpi has re-

maintained a British possession. After the capture of Jhansi and the rout of the mutineers at Kunch, they fell back on Kalpi, which throughout the previous operations they had made their principal arsenal. Here, on 22nd May 1858, Sir Hugh Rose (Lord Strathnairn) again defeated a force of about 12,000 under the Rani of Jhansi, the Rao Sahib, and the Nawab of Banda, who then fled to Gwalior.

Kalpi was formerly a place of far greater importance than at the present day. The E.I. Company made it one of their principal stations for providing their commercial investments. The Western outskirts of the town contain a large number of ruins, notably the tomb called the 84 *Domes*, and twelve other handsome mausolea. The buildings of the old commercial agency crown high ground near the river bank, but are now deserted. A ruined fort, situated on the steep bank of the Jumna above the town, overhangs the ghat or ferry, which has a picturesque temple, and is reached by a long flight of steps.

375 m. from Itarsi is **Cawnpore** junction station (p. 406).

(2) *Jhansi to Agra viâ Datia, Gwalior, and Dholpur, 133 m.*

254 m. from Itarsi, 16 m. from Jhansi, is **Datia** station. The town has 24,000 inhabitants, and is the residence of the Chief of the Datia State, which contains an area of 836 sq. m.

It stands on a rocky height surrounded by a good stone wall, and is full of picturesque houses and palaces. The Raja's present residence stands within the town, surrounded by a pretty garden. To the W. of the town, beyond the walls, is a very large palace of great architectural beauty, now untenanted.¹

¹ Fergusson's *Indian Architecture*, 2, 173.

261 m. Sonagir station. 2 m. off and visible from the railway are a number of Jain temples of modern date, forming an extremely picturesque group, well worth a visit.

299 m. from Itarsi is **Gwalior** station, 763 m. from Bombay, 194 m. from Delhi, by the G.I.P. Railway (R., D.B.), the capital of Maharaja Scindia. The present Chief is His Highness Maharaja Mukhtar-ul-Mulk, Azim-ul-Iktidar, Rafi-us-Shan, Wala Shikoh, Mohtasham-i-Dauran, Umdat-ul-Umra, Maharajadhiraj, Hisam-us-Sultanat, Lieutenant-General Sir Madhava Rao Scindia, Alijah Bahadur, Srinath, Mansur-i-Zaman, Fidwi-i-Hazrat-i-Malik-i-Muazzam, Rafi-ud-Darjat-i-Inglistan, G.C.S.I., G.C.V.O., G.C.P.M., A.D.C. to His Majesty the King-Emperor, LL.D. (Cambridge and Edin.), and D.C.L. (Oxford). The area of the Gwalior State is 25,862 sq. m., the population 3,236,753, and the revenue 164 lakhs. The place is famous for its fort, one of the most ancient and renowned strongholds in India. Population of Lashkar, Gwalior, and Morar, 100,680.

For many years a strong brigade of British troops was maintained at *Morar*, a few m. E. of the fort. The latter was garrisoned by British troops from 1858 to 1886, when it was restored to the Maharaja's custody, and with Morar was made over to him in exchange for Jhansi.

History.

General Cunningham, in vol. 2. of the *Reports of the Archaeological Survey*, gives a most valuable account of Gwalior. It is believed to have been founded in the 6th century A.D., when Toramana, a tributary Prince under the Guptas, rebelled, and became sovereign of all the territory between the Jumna and Narbada. In the

reign of his son the Sun Temple was built and the Suraj Kund excavated; and Gwalior was founded by Suraj Sen, a Kachhwaha Chief, who was a leper, and coming when hunting to the Gopagiri Hill, on which the fort stands, received a drink of water from the hermit Gwalipa, which cured him of his leprosy. Suraj Sen also received a new name, Suhan Pal, from the hermit, with a promise that his descendants should reign as long as they were called Pal; so eighty-three reigned, but the eighty-fourth was called Tej Karn, and, having discarded the name of Pal, lost his kingdom.

This Kachhwaha dynasty was succeeded by seven Parihara Princes, who ruled for 103 years—till 1232 A.D., when Gwalior was taken by Altamsh in the 21st year of the reign of Sarang Deo.

The capture of Gwalior by Altamsh was commemorated in an inscription placed over the gate of the Arwahi, and the Emperor Babar states that he saw it, and the date was 630 A.H. = 1232 A.D. From 1232 onwards the Emperors of Delhi used Gwalior as a State prison. In 1375 A.D. the Tomar Chief, Bir Singh Deo, declared himself independent, and founded the Tomar dynasty of Gwalior.

Early in the 15th century the Gwalior Chiefs paid tribute to Khizr Khan of Delhi, and in 1424 Gwalior, being besieged by Hoshang Shah of Malwa, was delivered by Mubarak Shah of Delhi. In 1425 Dongar Singh commenced the great rock sculptures at Gwalior, and his son Kirti Singh, 1454, completed them. In 1465 Husain Shah, the Sharki king of Jaunpur, besieged Gwalior, and obliged it to pay tribute. Man Singh acknowledged the supremacy of Bahlol Lodi and of Sikandar Lodi of Delhi; the latter in 1505 marched against Gwalior, but fell into an ambuscade, and was repulsed with

great loss. In 1506, however, he captured Himmatgarh, but passed by Gwalior, which he despaired of reducing. In 1517 he made great preparations at Agra for the conquest of Gwalior, but died before he could accomplish his purpose. Ibrahim Lodi sent an army of 30,000 horse, 300 elephants, and other troops, against Gwalior, and a few days after they reached that place Man Singh died. He was the greatest of the Tomar Princes of Gwalior, and constructed many useful works, amongst others the great tank to the N.W. of Gwalior, called the *Moti Jhil*. His palace in the fort is the noblest specimen of Hindu domestic architecture in N. India. After Man Singh's death his son Vikramaditya sustained the siege for a year, but at last surrendered, and was sent to Agra, where he became the friend of the Emperor, and died fighting at his side against Babar on the field of Panipat in 1526 A.D. His widows, according to tradition, presented the Koh-i-nur to Prince Humayun in return for the protection accorded by him to them.

Babar sent Rahimdad with an army to Gwalior, which he took by a stratagem, suggested by the holy Muhammad Ghaus. In 1542 Abul-Kasim, Governor of Gwalior, surrendered his fortress to Sher Shah. In 1545 Salim, son of Sher, brought his treasure from Chunar to Gwalior, and in 1553 died at the latter place. Rana Sah, son of Vikram, tried to seize Gwalior, and fought a great battle there, which lasted for three days, with Akbar's troops, but was defeated, and the fortress remained in the hands of the Mughals till the fall of their power. In 1761 Gwalior was taken by Bhim Singh, the Jat Rana of Gohad, and in 1779 captured by Major Popham from the Mahrattas, into whose hands it had fallen, and restored to the Rana of Gohad. It was again taken by the Mah-

rattas under Mahdaji Scindia¹ in 1781, and once more captured by the English under General White in 1803, and restored to the Mah-rattas in 1805. In 1844, after the battles of Maharajpur and Pan-niar, it was a third time occupied by the British.

At the time of the Mutiny Maharaja Scindia had, besides 10,000 troops of his own, a Contingent consisting of two regiments of Irregular Cavalry—1158 men of all ranks—seven regiments of Infantry—aggregating 6412 men—and 26 guns, with 748 Artillerymen. This force was officered by Englishmen, and the men were thoroughly drilled and disciplined, and were, in fact, excellent soldiers, as they proved by defeating and almost driving into the river General Windham's brigade at Cawnpore.

The Maharaja and his Minister, Sir Dinkar Rao, remained loyal to their fealty; but the Contingent troops mutinied on Sunday, 14th June, and murdered their English officers and a number of women and children; and those who escaped, or had previously taken refuge in the Maharaja's palace, had to be removed to Dholpur, and thence to Agra. After this Gwalior remained quiet for a time; but later the Contingent troops joined Tantia Topi at Cawnpore.

On the 22nd May 1858 an important battle was fought in front of Kalpi, in which the mutineers, led by Tantia Topi and the Rani of Jhansi, were severely defeated by Sir Hugh Rose. They retreated in the direction of Gwalior, and on the 1st June Scindia, with all his army, moved out from Gwalior to meet them. The engagement took place about 2 m. E. of Morar. Colonel Malleson thus describes it: "Scindia had with him 6000 infantry, about 1500

cavalry, his own bodyguard 600 strong, and eight guns, ranged in three divisions—his guns centre. About 7 o'clock in the morning the rebels advanced. As they approached, Scindia's eight guns opened on them. But the smoke of the discharge had scarcely disappeared when the rebel skirmishers closed to their flanks, and 2000 horsemen, charging at a gallop, carried the guns. Simultaneously with their charge Scindia's infantry and cavalry, his bodyguard alone excepted, either joined the rebels or took up a position indicative of their intention not to fight. . . . The rebels then attacked the bodyguard, who defended themselves bravely, but the contest was too unequal, and Scindia was compelled to fly, accompanied by a very few of the survivors. He did not draw rein till he reached Agra."

The Rani thereupon seized the fort of Gwalior, and proclaimed the Nana as Peshwa. On hearing of this Sir Hugh Rose immediately marched upon Gwalior. As he neared it he was joined by Sir Robert Napier (Lord Napier of Magdala), who took command of the 2nd Brigade, and by the Hyderabad troops. On 16th June he came into touch with the rebels at Bahadurpur, near Morar. In spite of the long and fatiguing march which his force had endured, Sir Hugh attacked the enemy at once, and drove them from their position.

"The main body of the enemy, driven through the cantonments, fell back on a dry nullah with high banks, running round a village which they had also occupied. Here they maintained a desperate hand-to-hand struggle with the British. The 71st Highlanders suffered severely, Lieutenant Neave, whilst leading his men, falling mortally wounded; nor was it till the nullah was nearly choked with dead that the village

¹ This Prince was wounded at the Battle of Papipat (p. 284), where one of his brothers was killed. Two more brothers fell in other engagements.

was carried. The victory was completed by a successful pursuit and slaughter of the rebels by the 14th Light Dragoons."

Early next morning (the 17th of June) Brigadier-General Smith, marching up from Jhansi, reached Kotah-ki-sarai, 5 m. to the S.E. of Gwalior, without opposition. There he discovered the enemy in great force, and showing a disposition to attack. "Reconnoitring the ground in front of him, he found it very difficult, intersected with nullas and impracticable for cavalry. He discovered, moreover, that the enemy's guns were in position about 1500 yds. from Kotah-ki-sarai, and that their line lay under the hills, crossing the road to Gwalior. Notwithstanding this General Smith determined to attack. First he sent his horse artillery to the front, and silenced the enemy's guns, which limbered up and retired. He then sent his infantry across the broken ground, under the command of Colonel Raines of the 95th. Raines led his men, covered by skirmishers, to a point about 50 yds. from the enemy's works, when the skirmishers made a rush, the rebels falling back as they did so. Raines then found himself stopped by a deep ditch with 4 ft. of water," but, surmounting the difficulty, he gained the abandoned entrenchment. "Whilst he was continuing his advance across the broken and hilly ground, General Smith moved his cavalry across the river Umrah, close to Kotah-ki-sarai. They had hardly crossed when they came under fire of a battery which till then had escaped notice. At the same time a body of the enemy threatened the baggage at Kotah-ki-sarai. Matters now became serious. But General Smith sent back detachments to defend the baggage and rear, and pushed forward. The road, before debouching from the hills between his position and Gwalior,

ran for several hundred yards through a defile along which a canal had been excavated. It was while his troops were pressing through this defile that the principal fighting took place. Having gained the farther end of the defile, where he joined Colonel Raines, General Smith halted the infantry to guard it, and ordered a cavalry charge. This was most gallantly executed by a squadron of the 8th Hussars, led by Colonel Hicks and Captain Heneage. The rebels, horse and foot, gave way before them. The Hussars captured two guns, and, continuing the pursuit through Scindia's cantonment, had for a moment the rebel camp in their possession.

"Amongst the fugitives in the rebel ranks was the resolute woman who, alike in council and on the field, was the soul of the conspirators. Clad in the attire of a man and mounted on horseback, the Rani of Jhansi might have been seen animating her troops throughout the day. When inch by inch the British troops pressed through the pass, and when, reaching its summit, General Smith ordered the Hussars to charge, the Rani of Jhansi boldly fronted the British horsemen. When her comrades failed her, her horse, in spite of her efforts, carried her along with the others. With them she might have escaped, but that her horse, crossing the canal near the cantonment, stumbled and fell. A Hussar, close upon her track, ignorant of her sex and her rank, cut her down. She fell to rise no more. That night her devoted followers, determined that the English should not boast that they had captured her even dead, burned her body."

Following up the operations above described late into the night of the 19th June, Sir Hugh regained the whole place—Morar, the city, the Lashkar—everything but the fort, which was held by a few fanatics, who had fired on

our advancing troops whenever they could throughout the day, and recommenced the following morning.

"On the morning of the 20th Lieutenant Rose, 25th Bombay Native Infantry, was in command with a detachment of his regiment at the kotwali, or police-station, not far from the main gateway of the rock fort. As the guns from its ramparts continued to fire, Rose proposed to a brother officer, Lieutenant Waller, who commanded a small party of the same regiment near him, that they should attempt to capture the fortress with their joint parties, urging that, if the risk were great, the honour would be still greater. Waller cheerfully assented, and the two officers set off with their men and a blacksmith, whom, not unwilling, they had engaged for the service. They crept up to the first gateway unseen. Then the blacksmith, a powerful man, forced it open; and so with the other five gates that opposed their progress. By the time the sixth gate had been forced the alarm was given, and, when the assailants reached the archway beyond the last gate, they were met by the fire of a gun which had been brought to bear on them. Dashing onwards, unscathed by the fire, they were speedily engaged in a hand-to-hand contest with the garrison. The fight was desperate, and many men fell on both sides. The gallantry of Rose and Waller and their men carried all before them. Rose especially distinguished himself. Just in the hour of victory, however, as he was inciting his men to make the final charge, which proved successful, a musket was fired at him from behind the wall. The man who had fired the shot, a mutineer from Bareilly, then rushed out and cut him down. Waller came up and despatched the rebel—too late, however, to save his friend. But the rock fortress was gained."

The New City, or Lashkar.—When Daulat Rao Scindia obtained possession of Gwalior in 1794 and 1805, he pitched his camp to the S. of the fort, and a new city rapidly sprang up, which still retains the name of Lashkar, or 'The Camp. The *Sarafa*, or Merchants' Quarter, is one of the finest streets in India. In the *Phul Bagh* are the *Jai Bilas* and *Moti Mahal Palaces* of Maharaja Scindia. In the latter most of the State offices are at present located. In the centre of Lashkar is the *Barah*, or *Old Palace*, and near it are the houses of the chief Sardars.

The later buildings worthy of a visit are the *Dufferin Sarai*, the *Grand Hotel*, the *Elgin Club*, the *Jayaji Rao Memorial Hospital*, and the *Victoria College*, Maharaja Jayaji Rao's *Cenotaph*, the *Electric Printing Press*, the *General Post Office*, the *Theatre Hall*, and *Market*; the foundation-stone of the latter was laid by the Duke of Connaught, and it and the electrical installation were opened by King George V. (then Prince of Wales) in December 1905. The modern *Temple* was erected by the mother of one of the Scindia Chiefs.

The Old City has been gradually decaying, and is now only one-sixth as large as the New City. It is a crowded mass of small, flat-roofed, stone houses, lying along the foot of the N.E. and N. end of the rock. Flanking the city to the N. stands a curious old Pathan archway, the remains of a tomb. Outside the gate of the fort is the *Jami Masjid*, with its gilt pinnacled domes and lofty minarets. Sir W. Sleeman says (*Rambles*, I, 347): "It is a very beautiful mosque, with one end built by Muhammad Khan, in 1665 A.D., of the white sandstone of the rock above it. It looks as fresh as if it had not been finished a month."

On the eastern outskirts of the city is the noble tomb of the Muhammad Ghaus, a saint venerated in the time of Babar and

Akbar. It is of stone, and is one of the best specimens of Muhammadan architecture¹ of the early Mughal period. It is a square of 100 ft., with hexagonal towers at the four corners, attached at the angles instead of the sides. The tomb is a hall 43 ft. sq., with the angles cut off by pointed arches, from which springs a lofty Pathan dome. The walls are 5½ ft. thick, and are surrounded by a lofty veranda, with square bays in the centre of each side, enclosed by stone lattices of the most intricate and elaborate patterns. These are protected from the weather by very bold eaves, supported on long stone slabs resting on brackets. The dome was once covered with blue-glazed tiles.

The Tomb of Tansen, a famous musician, is a small open building 22 ft. sq., supported on pillars round the tombstone, close to the S.W. corner of the large tomb. The tamarind tree near the grave is much visited by musicians, as the chewing of the leaves is alleged to impart a wonderful sweetness to the voice.

To see the Gwalior Fort² an order used to be necessary: it could be obtained at the Residency Office, or from the Gwalior Hotel, where arrangements can be made for the elephant which the Maharaja kindly puts at the disposal of visitors to meet them at the foot of the steep ascent to the fort.

"The great fortress of Gwalior," says General Cunningham, "is situated on a precipitous, flat-topped, and isolated hill of sandstone," which rises 300 ft. above the town at the N. end, but only 274 ft. at the upper gate of the principal entrance. The hill is long and narrow; its extreme

length from N. to S. is 1½ m., while its breadth varies from 600 ft. to 2800 ft. The walls are from 30 ft. to 35 ft. high, and the rock immediately below them is steeply but irregularly scarped all round the hill.

The view from the fort is varied and extensive, but, except during the rainy season, when the hills are green, the general appearance of the country is brown and arid. To the N., on a clear day, may be seen the gigantic temple of Suhania, about 30 m. distant, and still farther in the same direction the red hills of Dhoipur. To the W., and within gunshot, lies the long, flat-topped sandstone hill of Hanuman, with a basaltic peak at the N. end and a white-washed temple on its slope, whence the hill has its name. Beyond, far as the eye can reach, nothing is seen but range after range of low sandstone hills. The conical peak of the Raipur hill towers over the lower ranges in the S., and to the E. the level plains, dotted with villages, lengthen till they pass out of sight. On the plain below lies the Old City of Gwalior, encircling the N.E. end of the fortress, and to the S., upwards of 1 m. distant, is the New City of *Lashkar*.

The main entrance to the fort is on the N.E. The ascent was formerly by many flights of broad steps alternating with pieces of paved level road, but these have been removed, and there is now a continuous road. The entrance is protected by six Gates which, beginning from below, are:—

The *'Alamgiri* Gate, built by Mu'tamad Khan, Governor of Gwalior, in 1660, and called after Aurangzeb, whose title as Emperor was 'Alamgir. It is quite plain, and the inscription is obliterated. Inside is a small courtyard and an open hall in which the Muhammadan Governors sat to dispense justice.

The *Badalgarh* or *Hindola* Gate has its name from the outwork

¹ See Fergusson's *Indian Architecture*, 2, 202.

² Permission is no longer required to visit the Gwalior Fort. Visitors sign their names in a book at the entrance to the fort.

Badalgarh, which was called from Badal Singh, the uncle of Man Singh. This gate is also called Hindola, from *hindol*, "a swing," which existed outside. It is a fine specimen of Hindu architecture. An inscription on an iron plate records its restoration by the Governor Saiyad 'Alam in 1648.

Close under the rock to the right is the stately Gujarati Palace, built for the Queen of Man Singh. It measures 300 ft. by 230 ft., and is two storeys high. It is built of hewn stone, and was once a very fine building.

The *Bhairon*, or Bansur Gate, was the work of one of the earliest Kachhwaha Rajas. It was called Bansur, from *bansur*, "archer"—literally a "bamboo-splitter,"—from the guard which had the charge of it. It has now been removed.

The *Ganesh* Gate was built by Dongar Singh, who reigned 1424 to 1454. Outside is a small out-work called *Kabutar Khana*, or "pigeon-house," in which is a tank called Nur Sagar, 60 ft. by 39 ft. and 25 ft. deep. Here, too, is a Hindu temple sacred to the hermit *Gwalipa*, from whom the fort had its name. It is a small, square, open pavilion, with a cupola on four pillars. There is also a small mosque with a chronogram giving a date corresponding to 1664 A.D.

Before reaching the *Lakshman* Gate is a temple hewn out of the solid rock and called *Chatarbhuja-mandir*, "shrine of the four-armed," sacred to Vishnu, inside which, on the left, is a long inscription, dated Sambat 933=876 A.D. It is 12 ft. sq., with a portico in front 10 ft. by 9 ft., supported by four pillars. There is a tank here, and opposite to it the tomb of Taj Nizam, a noble of the Court of Ibrahim Lodi, who was killed in assaulting this gate in 1518 A.D. Adjoining is an awkward flight of steps leading to the *North-Eastern group* of Jain Statues in the cliff

under the Muhammadan palaces. The sculptures are small, and unaccompanied by inscriptions, and are, therefore, unimportant; some of the caves are large. Farther S., on the face of the rock, are carvings of Mahadeo and his consort and about fifty lingams. There was also a colossal group of the Boar incarnation, 15½ ft. high, which was one of the oldest sculptures in Gwalior; but it is now quite defaced. A figure of an elephant over the statue has been cut away to form a canopy.

The *Hathiya Paur*, or Elephant Gate, was built by Man Singh, and forms part of his palace. Here was the carving of an elephant, which Babar and Abul-Fazl praised. Inside the Hathiya Paur and under the S. end of the Palace of Man Singh is the *Hawa Gate*; and the cool draught of air met through the passage here after the long hot ascent in the morning will be found to justify the name.

Turning to the right on reaching the level of the fort, the five palaces under which the ascent has passed may be first visited. The first of these is the *Man Singh Palace* (1486-1516, repaired in 1881), also called the *Chit Mandir*, or Painted Palace, as "the walls are covered with a profusion of coloured tiles—bands of mosaic candelabra, Brahmani ducks, elephants, and peacocks—enamelled blue, green, and gold, giving to this massive wall an unsurpassed charm and elegance. The tiles of the great windowless S. wall possess a brightness and delicacy of tint unblemished by the four centuries which they have weathered. Nowhere do I remember any architectural design capable of imparting similar lightness to a simple massive wall" (Rousselet). The palace was greatly admired by the Emperor Babar also. It is two storeys high, with two storeys of underground apartments, now uninhabitable

from the bats. The E. face is 300 ft. long and 100 ft. high, and has five massive round towers, surmounted by open-domed cupolas, and connected at top by a battlement of singularly beautiful open lattice-work. The S. face is 160 ft. long and 60 ft. high, with three round towers connected by a battlement of lattice-work. The N. and W. sides are somewhat ruined. The rooms are arranged round two courts—small, but with singularly beautiful decoration.

The *Vikram Palace* lies between the Man and Karan Palaces, and is connected with them by narrow galleries.

The *Karan Palace* should be called the *Kirti Mandir*. It is long and narrow, and of two storeys. It has one room 43 ft. by 28 ft., with a roof supported by two rows of pillars. There are smaller rooms on either side, and bath-rooms below, with some fine plaster-work on the domed ceilings. Close by to the S. is a hall (1516 A.D.) 36 ft. sq., with a roof in the form of a Hindu dome, supported on eight carved ribs, of which four spring from the side pillars and four from the angles of the building. Internally the top of the dome is a flat square formed by the intersection of the ribs. The roof is flat, and once had a pavilion on it.

The *Muhammadian Jahangiri* and *Shah Jahan Palaces* at the N. end of the fort are of rubble plastered, and are quite plain and of no architectural interest. They are used now as magazines for military stores.

A little to the N.W. of them is the *Johar tank*, so called from the immolation of Rajput women, which occurred here before the fortress was taken by Altamsh. On the W. wall, slightly to the S., and just above the *Dhonda Gate*, are the ruins of the buildings

known as the *Nauchauki* or *Nine Cells*, which constituted the State prison of so many Emperors of Delhi. The narrow, steep staircases leading to the dungeon rooms can still be traversed.

Passing S. beyond the *Hawa Gate* and the guard-house facing it, the next object of interest is the ruined *Jain Temple* (1100 A.D.) on the E. wall, of which but little remains now. Farther S., on the same side, are the two *Sasbahu* temples, and from the walls near all three a fine view is obtained of the Eastern cliff of the fortress. The names *Sas-bahu* or *Sahasrabahu* mean "mother-in-law and daughter-in-law," or "roo-armed" temples. The larger temple, said to have been built by *Raja Mahipal*, is 100 ft. long by 63 ft. broad. The entrance is to the N., and the adytum to the S. The temple is now 70 ft. high, but the top has been broken, and *General Cunningham* thinks it was once 100 ft. high. It stands on a richly-carved plinth. There is a long inscription inside the portico, with the date 1093 A.D., and there are figures of *Vishnu* over the main entrances. The central hall is 31 ft. sq. It is crowded with four massive pillars to aid in bearing the enormous weight of its great pyramidal roof. The smaller temple is built in the shape of a cross, and is open on all four sides. The body is 23 ft. sq., supported on twelve pillars. The plinth is 6 ft. high, and is decorated like that of the great temple. The pillars are round, with octagonal bases and bracketed capitals. The lower parts of the shafts in both temples are ornamented with groups of female dancers. They are fine specimens of the ornate style of mediæval Hindu architecture.

From this point it is necessary to cross again to the W. side, where the *Teli-ka-mandir* stands, passing the *Suraj Kund tank en route*.

This tank is 350 ft. by 180 ft., and is believed to have been constructed about 300 A.D., and to be consequently the oldest reservoir in the fort.

The Teli-ka-mandir¹ (probable date, 11th century; restored 1881-83) is 60 ft. sq., with a portico projecting 11 ft. on the E. side. The sides slope upwards to 80 ft., where the building ends in a horizontal ridge 30 ft. long. It is the loftiest building in Gwalior. The doorway is 35 ft. high, and has a figure of Garuda over the centre. It was originally a Vishnavite temple, but since the 15th century it has been Saivite. The whole is covered with sculptures. The gateway in front of it was formed out of fragments found in the fort by Major Keith, R.E., who was entrusted with the repairs and restorations made in 1881-83. The interesting archaeological fragments placed round the temple were discovered in various parts of the fort during Major Keith's operations. The temple is close to the cliff of the Western Arwahi ravine, outside the Southern wall of which General White's breach was made, and every one will proceed past the round Katora tank and the Ek Khamba tank, with a pillar in it, as far S. as this and the point, still called Faringhi Pahar, of Major Popham's esplanade; while those who proceed to the extreme S. point of the fort will not be disappointed by the interesting tanks there and the beautiful view of Lashkar.

Returning from the S., the Ganga tank may be visited, and the route may be pursued to the N.W. of the Suraj Kund, opposite the Katora tank to the fine gate which forms the entrance to the Arwahi ravine, on the farther side of which is the Mansarowar tank. The S. end of the ravine is closed by a

wall with a double gate, near which are the wells which supply the fort with drinking-water; and on either side of it, from the bottom of the steep descent from the N. gate, are the Jain statues of the Arwahi group.

"These Rock Sculptures of Gwalior," writes General Cunningham, "are unique in Northern India, as well for their number as for their gigantic size. They are all excavated in the steep cliff immediately below the walls of the fortress, and are most of them easily accessible. There are small caves and niches in almost every place where the face of the rock is tolerably smooth and steep, but the more prominent excavations may be divided into five principal groups, which I will designate according to their positions, as 1st, the Arwahi group; 2nd, the South-Western group; 3rd, the North-Western group; 4th, the North-Eastern group; 5th, the South-Eastern group. Of these the first and the last, which are by far the most considerable both in number and size, are the only sculptures that have attracted travellers. Most of them were mutilated by order of the Emperor Babar, 1527 A.D., only sixty years after they were made. Babar himself records the fact in his memoirs: 'They have hewn the solid rock of this *Arwa*, and sculptured out of it idols of larger and smaller size. On the S. part of it is a large idol, which may be about 40 ft. in height (really 57). These figures are perfectly naked. *Arwa* is far from being a mean place; on the contrary it is extremely pleasant. The greatest fault consists in the idol figures all about it. *I directed these idols to be destroyed.*'" The statues, however, were not destroyed, but only mutilated, and the broken heads have since been repaired by the Jains with coloured stucco.

The Arwahi group consists of twenty-two principal figures,

¹ See Fergusson's *Indian Architecture* 2, 139.

which are accompanied by six inscriptions, dated Sambat 1497, 1510=1440 A.D. and 1453, during the sway of the Tomar Rajas. The chief statues are: No. 17, a colossal figure of Adinath, the first Jain pontiff, who is known by the symbol of a bull on the pedestal. This has a long inscription, dated 1440 A.D., in the reign of Dongar Singh. The largest figure of this group, and of all the Gwalior sculptures, is the colossus, No. 20, which is 57 ft. high, or six and a half times the length of the foot, which is just 9 ft. The extreme W. figure of this group, No. 22, is a seated colossus upwards of 30 ft. high, of Nemnath, twenty-second Jain pontiff, known by a shell on the pedestal.

"The South-Western group, just outside the Arwahi wall, consists of five principal Jain figures. No. 2 is a sleeping female 8 ft. long, lying on her side, with her head to the S. and face to the W. No. 3 is a seated group of a male and female with a child, who are Siddhartha and Trisala, the reputed father and mother of the infant Mahavira, the last of the twenty-four Jain pontiffs. The sleeping female also is probably intended for Trisala." S. of this group is the Gharghar Gate, at which General White's assault of the fortress was made.

If it is desired to proceed from here to the Jain sculptures on the S.E. face of the fortress, the carriage should be sent round to this point from the N.E. entrance. It is quite impossible, however, to see all the interesting sights of the Gwalior fort on a single visit, and each visitor must decide for himself what he will see and how he will see it.

The road from the Arwahi ravine to the Lashkar, and round to the nearest point to the South-Eastern group which a carriage can reach, is fair; but that N. to the N.W. group of statues is bad, and they had better be visited by passing

round the N. side of the city. The figures there are, however, insignificant, and few will care to visit them. The South-Eastern group is the most picturesquely situated of all, with trees and undergrowth adjoining it below; it is also the largest and most important group, as there are eighteen colossal statues from 20 ft. to 30 ft. high, and as many more from 8 ft. to 15 ft., which occupy the whole face of the cliff for upwards of $\frac{1}{2}$ m. They are all of date 1468-1473 A.D., and are the latest of such works in India. In many cases a screen-wall has been left in front of the figure as high up as its waist. A few caves are occupied by mendicant Bairagis, and cannot always be visited. The table on opposite page gives details of each statue.

From Gwalior three light lines of State Railway run, S.W. to Sipri (74 m.), not far from which, in the Narwar jungle, the great rebel leader, Tantia Topi, was betrayed and captured on 7th April 1859, N.E. to Bhind (53 m.) and, W. by S. to Sheopur, the total length of the mileage being 249.96.

336 m. About 4 m. S. of Dholpur there is a very fine bridge over the Chambal, built of the famous red sandstone of Dholpur, a ridge of which, from 560 ft. to 1074 ft. above sea-level, runs for 60 m. through the territory, and has many quarries. The river Chambal is bordered everywhere by a labyrinth of ravines, some of which are 90 ft. deep and extend to a distance of from 2 m. to 4 m. from the river banks. The floods of the river are very remarkable. The highest recorded flood above summer level rose no less than 97 ft.

340 m. Dholpur station (R.), the chief town of the Native State of that name. In 1658 Aurangzeb defeated his elder brother Dara

Shikoh at Ran-ka-chabutra, 3 m. E. of Dholpur, and in 1707 Aurangzeb's sons, Azim and Mu'azzim, contending for the crown, fought a great battle at the village of Barehta, near Dholpur, the former being killed, and the latter becoming Emperor, with the title of Bahadur Shah. The palace of Dholpur is a moderately handsome building.

Kirat Singh in the early part of the 19th century; but now, being neglected, it is crumbling away. (2) The fort of Bari, which was built by the Ghorī Emperor Firoz Shah in 1286 A.D. It has been rebuilt from time to time, and is now used as headquarters of the Bari Tahsil. (3) Khanpur Mahal, which is situated some 3 m. to the S. of Bari, and consists of a long

CAVES.		SCULPTURES.			
No.	Front depth and height.	Names.	Position.	Height.	Symbol.
	Feet.			Feet	
1	23 × 21 × 27	—	—	30	—
2	10 × 10 × 10	—	—	—	—
3	15 × 12 × 17	Adinath	Standing	7	Bull
4	15 × 14 × 16	4 others	—	—	—
		Adinath	—	14	Wheel
		Nemnath	—	—	Shell
5	—	Adinath	—	—	Bull
6	26 × 12 × 16	Supadma	Sitting	15	Lotus
7	15 × 10 × 20	—	Standing	20	—
8	21 × 10 × 20	Adinath	Sitting	6	—
9	16 × 7 × 28	Male Figure	Standing	21	—
10	10 × 7 × 15	Female	Lying	—	—
		Chandra Prabha	Standing	12	—
		2 others	—	12	—
11	12 × 8 × 25	Chandra Prabha	Sitting	21	Crescent
12	31 × 10 × 25	Sambhunath	—	21	Horse
13	40 × 10 × 25	Nemnath	Standing	21	Shell
		Sambhunath	Sitting	—	Horse
		Mahavira	Standing	—	Lion
14	26 × 16 × 32	Adinath	Sitting	20	Bull
15	26 × 16 × 33	Adinath	Sitting	28	—
16	24 × 22 × 34	—	—	30	—
17	80 × 8 × 30	Kantath	Standing	26	Goat
		Shantanath	Sitting	26	Antelope
		Adinath	Sitting	26	Wheel
		And 4 others	—	26	—
18	15 × 10 × 30	—	Standing	26	—
19	16 × 10 × 30	—	—	26	—
20	22 × 8 × 20	Adinath	—	8	Wheel
21	27 × 35 × 15	—	—	—	—

Among other objects of archaeological interest in Dholpur State are:—(1) Shergarh fort, which is supposed to have been built some 3000 years ago by Raja Maldeo. It was repaired and rebuilt by several Rajas in the later generations. In 1540 Sher Shah, of the Sur dynasty, who drove Humayun out of India, restored it and gave it its present name of Shergarh. It was lastly used by Maharaja Rana

and picturesque series of pavilions, the principal of which are enclosed by a wall. The Mahal was built for the Emperor Shah Jahan by Safi Khan Aziz Khan, a local Mansabdar. The palace was never occupied, and gradually fell to pieces. An attempt has been made by the Dholpur Darbar to repair and renovate some pavilions. Just below the palace is a large tank—an extensive sheet of

water, where an annual duck shoot of the Maharaj Rana is held. (4) Mach Kund. It is a historical tank surrounded by temples, at which fairs are annually held. Both ancient and modern temples crowd the place, but the older buildings are falling to pieces. It is considered to be a sacred place, and its name is traced back to a Raja of that name, the twenty-fourth of the Surajbansi, who reigned nine generations before the birth of Sri Ramchandra. (5) Ram Sagar. This is a modern work, and is an extensive irrigation tank constructed by Maharaj Rana Ram Singh at a cost of above 3 lakhs of rupees, to supply water to the surrounding villages in Tahsil Bari. At Dholpur there is a High School, held in a grand building originally built as a mausoleum. Among other public institutions are a Sardar Hospital, well equipped; a Dharm-sala; and a D.B. opposite to the railway station at Dholpur. From Dholpur to Bari there is a light railway owned by the State. At Mania, another railway station on the G.I.P. in the State, there is another D.B. The accommodation at both Dholpur and Mania D.B.'s is reasonably sufficient.

The population of the State in 1911 was 263,399, and the gross annual revenue, based on a recent five years' average, was Rs.1,172,000. The climate is generally healthy, and the annual rainfall for the whole State averages between 25 in. and 28 in. The mean temperature at Dholpur varies from 60 in January to 96 in May.

373 m. Agra Cantonment station where travellers by this route alight for the hotels. The G.I.P. line runs on to the Raja ki Mandi station, and so to Muttra and Delhi (p. 228).

(3) *Jhansi to Manikpur*, 181 m.

Jhansi junction station (see p. 144).

7 m. from Jhansi is Orchha station, at the old capital of the Orchha State, the oldest and highest in rank of all the Bundela Principalities, and the only one of them that was not held in subjection by the Peshwa. It is built on both banks of the Betwa. There is an imposing fortress, connected by a masonry bridge with the rest of the town, containing in the S.W. corner of the city, within the walls, the magnificent 17th-century palace, the residence of Bir Singh Deo (p. 144), and a palace named after the Emperor Jahangir. The Chhatra of Bir Singh Deo (1605-27) is also fine. Near the E. gate is a massive palace built by Maharaja Subhakaran. This building, though not so fine as Bir Singh Deo's palace, is still one of the finest buildings in the city. Within a mile from the N.W. gate of the city is the imposing stone building in the centre of a park called Radha Niwas, built by the late Maharaja Sir Bhawani Singh, K.C.S.I. It has been temporarily used as a War Hospital, well equipped, for Indian soldiers.

Tikamgarh (*Tehri*), the present capital, in the S.W. corner of the State, is about 60 m. S. from Orchha, with which it is connected by road; also with Lalitpur Railway station on the W. and Mau-Ranipur Railway Station on N.E. by metalled roads, 36 m. and 42 m. respectively.

14 m. from Jhansi is Barwa-Sagar station (D.B.). The town is picturesquely situated at the foot of a rocky ridge on the shore of the Barwa-Sagar lake, an artificial sheet of water formed by a

masonry embankment $\frac{3}{4}$ m. in length, constructed by Udot Singh, Raja of Orchha, between 1705-37, and containing two craggy, wooded islets. Below, a tract of land, extending over 4 m., is thickly planted with mango and other trees, many of great age and enormous size. N.W. of the town rises a fine old castle, also built by Udot Singh, but now uninhabited. 3 m. W. stand the remains of an old Chandel temple, built of solid blocks of stone, carved with the figures of Hindu gods, much defaced by Musalmans.

40 m. **Mau station** (D.B. and Inspection House). Mau Ranipur (population 12,954+4955) is, next to Jhansi, the principal commercial town of Jhansi district. Its buildings are remarkably picturesque, in the style peculiar to Bundelkhand, with deep eaves between the first and second storeys and hanging balconies of unusual beauty. Trees line many of the streets, and handsome temples ornament the town, the principal being that of the Jains, with two solid spires and several cupolas. An old brick-built fort with bastions adjoins the bazar, and contains the public offices.

Paricha, 14 m. from Jhansi on the Cawnpore road: the head works of the Betwa Canal 71 m. long. There is a magnificent masonry dam, which holds up the water of the Betwa river. The supply was found insufficient and a second dam was constructed in 1908 at Dhukwan, 20 m. further up the river. There is a metalled road to Dhukwan from Jhansi (22 m.). At both places there are finely situated bungalows. Permission to occupy them may be obtained from the Executive Engineer (Irrigation) Jhansi. The works are interesting as fine examples of engineering skill.

Deogarh. A very interesting place for archaeologists. Finely situated on a bluff overlooking the Betwa are the remains of temples dating back to the times of Chandragupta and Asoka. The place can best be reached by train from Jakhlaun station (about 12 m.) on the G.I.P. Railway.

53 m. from Jhansi is **Harpalpur station** (R.R.), 66 m. to Banda, and 62 m. farther to Manikpur, for Nowgong Cantonment, 19 m. distant (population 9421). There are a D.B. for travellers and a Military Works Inspection Bungalow for military officers, both in the Cantonment; also a Circuit House in the Civil Lines. A railway is to be made between the two places. This Cantonment, next to that of Jhansi, is the chief military station of Bundelkhand. In 1857 the troops in it mutinied on the 10th June, and the Europeans who were not murdered were compelled to leave the place, and made their way with numerous losses on the road to Kalinjar, and thence to Banda or Allahabad.

67 m. **Jaitpur** (Belatal station). The town was formerly the capital of the State of the same name. It is picturesquely situated on the W. of a large tank, called Belatal, said to have been built by Bala Varma, a Chandel ruler of Mahoba: it has a circumference of nearly 9 m. and is of considerable depth. Two irrigation canals are run from it. On the W. edge of Belatal runs a chain of several low hills; a fort is built on the top and along the slopes. The town and fort are ascribed to Jagatraj, son of Chatarsal, the Bundela Chief who died in 1731. There is a temple called the Dhamsa, near the railway station, superintended by a mo-hunt. The town is slowly decaying and is now unimportant. A bungalow is available for travellers

at Jaitpur by permission of the Collector of Hamirpur.

86 m. from Jhansi is **Mahoba**. (District Board and Survey Bungalows can be used with permission of the Collector of Hamirpur.)

Mahoba is believed to have existed from the most remote times and to have borne different names in the successive cycles through which the world has passed. Its name in the present evil age Kala-Yug is Mahoba, said to be derived from a great sacrifice (Mahot-Sava) performed by its reputed founder, Chandra Varma, the Chandel Raja, about 800 A.D. The town stands on the edge of Madan Sagar lake, named after the great Chief Madana Varma. There are three distinct portions of the town: one, the old fort, N. of a low hill; one, the inner fort, on the top of the hill; and one, the Dariba, or "pan" shop, on the S.

Architectural antiquities of the Chandel period abound throughout the neighbourhood. The Ram Kund marks the place where Chandra Varma, founder of the dynasty, died; and the tank is believed to be a reservoir into which the united waters of all holy streams pour themselves. The fort, now almost entirely in ruins, commands a beautiful view over the hills and lakes. The temple of Mania Deva, partially renovated, has in front of its entrance a stone pillar inscribed to Madana Varma. Outside this temple is a stone pillar known as the "Dewal dip," or "Alha ki Gilli," the staff of Alha. Passing further along we come to the *dargah* of Pir Mubarak Shah: this is built entirely of Hindu materials. Of the lakes, confined by magnificent masonry dams, two have greatly silted up, but the Kirat and Madan Sagar, works of the 11th and 12th centuries, still remain deep and clear sheets of water. The shores of the lakes and the islands in their

midst are thickly covered with ruined temples, monstrous figures carved out of the solid rock, pillars, broken sculpture and other early remains, while on the hills above stand the summer-houses of the early Rajas, and shrines overhang the edge. Relics of Jain temples and Buddhist inscriptions also occur. The existing monuments of Muhammadan date include the tomb of Jalhan Khan, constructed from the fragments of a Saivite temple, and a mosque, also built of Chandel materials. Besides the Hindu-Muhammadan remains in the town there are a number of broken Jain statues lying about, indicating there must have been a number of Jain temples in the place. Buddhist statues are also found. On a hill adjoining the S.E. bank of Madan Sagar there are twenty-four rock-hewn images of the "Tirthankaras," dated Sambat 1206 (1149 A.D.)

Mahoba has been fixed upon as the new headquarters of the Hamirpur District, and will then be a town of considerable importance. The motor road from Jhansi through Nowgong (65 m.) skirts Mahoba (102 m.)—no European shops or supplies—and reaches Banda at 132 m.

A railway runs through the E. portion of Hamirpur District from Banda to Cawnpore with stations in the District at Maudaha and Sumerpur, and Jumna bank. There are no hotels in the District. A new tank of about the size of Belatal has been constructed in 1914, called "Majhgawan Tank," some 6 m. S. of Belatal. This tank irrigates the S.W. portion of Kul-pahar *tahsil*. No hotels in Hamirpur District; no European supplies, though at a pinch such could be obtained from the Joint Magistrate or the European community at Mahoba.

Khajraho (Chhatarpur State, Central India) is about 60. m.

from Harpalpur (G.I.P. Railway) *via* Nowgong and Chhatarpur, and about 36 m. from Mahoba. There is a good metalled road from Harpalpur up to Khajraho; but the road from Mahoba is partly unmetalled. Bazar tongas are available from Harpalpur, Nowgong, and Chhatarpur at about Rs.15, Rs.10, and Rs.7 respectively, but only country-carts can be had from Mahoba for Rs.3 to Rs.4. It was formerly the capital of the old kingdom of Jahoti, which practically corresponds with the modern Bundelkhand. Its present importance lies in its magnificent series of beautiful temples, which are probably the best of their type in Northern India. Hiuen Tsang mentions it in the 7th century, and General Cunningham ascribes the graceful pillared porch of the Ghantai Temple to the same period. A high mound probably covers the ruins of a Buddhist monastery. There are thirty temples in the group which, with the exception of two old buildings, were all built between 950 and 1050 A.D. Several of these have lately been repaired by the State at a cost of about a lakh of rupees, and a museum has been added to them. In one temple alone Cunningham counted over 800 statues, half life-size, and eight sculptured elephants of like proportions. These noble buildings were mainly constructed by the Chandel dynasty, who ruled here from 870 to 1200 A.D. An annual fair and exhibition are also held here in March or April.

119 m. from Jhansi is Banda station (R., D.B.) (population 21,061), a municipal town and the headquarters of the Banda District. A branch line of the G.I.P. Railway runs from Banda, through Hamirpur to Cawnpore. It stands

on an undulating plain, 1 m. E. of the right bank of the Ken river. "There is a pontoon bridge here in the dry season and a ferry in the rains, when special arrangements must be made for crossing, as the ordinary ferry-boat has insufficient accommodation for motors. In the dry season the approaches on both sides and the roadway over the pontoon bridge require extremely careful driving." (*Motor Guide*, U.P.).

The modern town derived its importance from the residence of the Nawab of Banda, and from its position as a cotton mart. Since the removal of the Nawab in 1858, owing to his disloyalty during the Mutiny, the town has declined. There are five Jain temples, some of which possess fair architectural merit.

35 m. S. of Banda, and 24 m. S.E. of Atarra station, is the famous hill fort of Kalinjar, at which the Emperor Sher Shah is said to have met his death (1545). It contains many temples and antiquities, some dating back to the 12th century. It is still a favourite resort for pilgrims. It is necessary to use an ekka or country-cart for the trip, while that to the Ajaigarh fort, 16 m. farther, can be accomplished only on foot or on horseback. There are rest-houses at both places.

162 m. from Jhansi is Karwi Tarahwan (population 8,031). In 1805 the town formed a Cantonment for British troops, and in 1829 it became the principal residence of the Peshwa's representative, who lived in almost regal state, and built several beautiful temples and wells. Numerous traders from the Deccan were thus attracted to Karwi. During the Mutiny Narayan Rao assumed the government, and retained his independence for eight months. The accumulations of his family constituted the great treasure

1 Fergusson's *Indian Architecture*, 2, 49-54, 95-96, 103, 140-143.

afterwards so famous as the "Kirwee and Banda Prize Money." It was kept in a vault of the Bara, a large palace. Since the Mutiny the prosperity of Karwi also has gradually declined. There is a fine temple and tank with a masonry well attached, known as the Ganesh Bagh, built by Vinayak Rao in 1837. Six m. from Karwi is Chitrakot, a celebrated place of pilgrimage where Sita, Rama and Lakshman are said to have lived after their exile from Ajudhia.

181 m. from Jhansi is Manikpur junction station of E.I. Railway, Jubbulpore branch (see p. 41).

ROUTE 10.

BOMBAY to DELHI by Surat, Broach, Miyagam, Baroda, and thence

- (1) by broad gauge of the B.B. and C.I. direct to Delhi (865 m.) by Ratlam, Nagda, Kotah, Bharatpur, and Muttra;
- (2) To Ahmadabad, and thence by metre gauge of the B.B. and C.I. to Delhi (849 m.) by Mehsana, Palanpur, Abu Road, Marwar junction, Ajmer, Phalera junction, Jaipur, Bandikui junction, Alwar, Rewari, and Gurgaon, with excursions by road to Mount Abu; and by rail to (a) Dabhoi; (b) Luni junction (branch line to Hyderabad, Sind), Jodhpur, Bikaner, and Phalera junction.

The journey by the first route is the shortest to Delhi, occupying $27\frac{1}{2}$ hrs. as against 35 hrs. by the second route and $27\frac{3}{4}$ hrs. by Route

9, G.I.P. and Midland Railways, Fares, Rs.66, 4 as. and Rs.62, 7 as., Rs.33, 3 as. and Rs.31, 4 as., Rs.8, 12 as. and Rs.8, 1 a. The stations in Bombay city, where the mail trains stop, are Colaba,¹ Church Gate, and Grant Road, where ample time is given.

9 m. Mahim station, where the railway crosses a causeway connecting the island of Bombay with the island of Salsette. The country is flat and studded with villages and coconut groves. The Mahim band was constructed largely at the expense of the first Lady Jamsetjee Jeejeebhoy.

108 m. Daman Road station, * (D.B.). Daman (7 m. W.) is a Portuguese settlement subordinate to Goa (area 149 sq. m., population 47,320). It was taken by the Portuguese in 1531, again in 1535, and finally in 1559. The town (of historic interest) is situated on the Daman Ganga river, with a bad bar and a roadstead. The place in the days of small ships had a very considerable trade. It has a fort on each bank of the river. In the main fort, on the left bank, are the ruins of several old monasteries and two churches. In it are the houses of the Governor and his staff and the public offices. The smaller fort of St Jerome, opposite, is more modern (see also p. 489).

114 m. Udvada station. Remarkable as containing the oldest Parsi sacred fire in India. Some believe that the fire kept alive is that which was originally brought from Persia by the Parsis, and first kindled at Diu in 700 A.D. The temple in which the fire is kept is modern.

124 m. Balsar station. This place is occasionally used as a

¹ It is advisable to secure places in the train from the Colaba Terminus.

rest-camp, and near it is the village of Tithal, on the sea-coast, where many inhabitants of Gujarat resort in the hot season. There are fine sands and a rolling sea, though not so fine as at Dahanu and Gholwad (Thana district).

148 m. Navsari station (population 17,982). The capital of the Gaekwar's Southern possessions, and the headquarters, from the earliest days, of the Parsi community. Here the Zoroastrian Priesthood receive their initiation and confirmation. The *Town Hall* is an imposing building. A Parsi has established here a manufactory of essences and soaps on European principles.

167 m. Surat station * (R.). The name is derived by Sir Henry Elliot and others from Surāshtra, a name occurring in the *Mahabharata*, and supposed to refer to Gujarat and Kathiawar (part of which is still called Sorath), but this derivation has been questioned. There is also a legend of a man named Suratji, who ceded the land on which the castle was built. But this is probably a myth. About the 12th century the Parsis, who were driven from Persia 500 years before, and had settled in *Sanjan*, 70 m. S. of Surat, found their way here. Amongst Indian cities it is not a place of antiquity, but it had a large trade at the end of the 15th century, and in the 18th was one of the most populous and important mercantile cities in India, the port being much frequented by British and other European traders. It is the headquarters of a Collectorate, is situated on the river Tapti, and is surrounded on the land side by a wall about $5\frac{1}{2}$ m. in circuit, with twelve gates. Except the main street, running from the station road to the castle, the streets in Surat are narrow and tortuous, and some of them

still bear marks of the great fire in 1837, which raged for nearly two days, when 9373 houses were destroyed and many persons perished. Again in 1889 a fire broke out, which raged over twelve hours, and destroyed 1350 shops and houses. Besides fires, Surat has suffered severely from floods, the severest being in 1837, the same year as the fire, and in 1883. In 1896 Lord Elgin inaugurated here the Tapti Railway, a local joint-stock enterprise, to run up the valley of the Tapti (see p. 165).

The population of Surat as late as 1797 was estimated at 800,000, but this figure is probably enormously exaggerated. Owing to the silting up of the river Tapti and the rise of Bombay, Surat declined, until in 1841 it had only 80,000 inhabitants. In 1913 it numbered 114,868. There are three mills employing 1600 hands.

The Portuguese found their way to the place soon after their arrival in India, and in 1512 sacked the then open town. On the 26th February 1573 it surrendered to Akbar after a siege of one month and seventeen days. Early in the 17th century the English began to visit it, and in 1612 the Mughal Emperor sent down a *farman* authorising an English Minister to reside at his court, and opening to English subjects the trade at Surat. In 1615 Captain Downton, with four ships, mounting eighty guns, defeated the Portuguese fleet, consisting of four galleons, three other large ships, and sixty smaller vessels, mounting in all 134 guns. This victory established the reputation of the English for war and their superiority over the Portuguese. The Dutch trade with Surat commenced in 1616, and for some years the Dutch Factory competed successfully with the English there. The French Factory was not founded till 1668, when the agents of the French

E.I. Company, which Colbert had established in 1664, settled at Surat. On the 5th January of the same year (1664) the prosperity of Surat received a severe blow from Sivaji, the founder of the Mahratta Empire, who with 4000 horse surprised the city, and plundered it for six days. The defenders of the English Factory, under Sir George Oxenden, who described the Mahratta leader as "Sevagye, ye grand rebell of ye Deccan," showed a bold front throughout, and recommended Sivaji to "save the labour of his servants running to and fro on messages, and come himself with all his army," and in the end were left unassailed. Their courageous defiance so pleased Aurangzeb that he sent Sir G. Oxenden a robe of honour, and granted the English an exemption from customs. The walls of Surat up to this time were of mud, but they were now ordered to be built of brick. In 1687 the seat of Government was transferred by the E.I. Company to Bombay from Surat, which was again partially pillaged by the Mahrattas in 1670, 1702, and 1706. About this time commenced the disputes of the rival London and English Companies, and on the 19th of January 1700 Sir Nicholas Waite, Consul for the King and President of the New Company, arrived at Surat. The struggle of the Companies continued till 1708, when they were united. This marked a new era for the English at Surat, who were fast approaching the period when they were to acquire political influence in the city, then the greatest emporium of W. India. The factory of the New Company is now occupied by the Irish Presbyterian Mission.

In 1759 the Nawab, by misgovernment and vexatious oppression of the Company's officers, provoked a conflict. The townspeople welcomed the attack, which was delivered near Athwa village, and resulted in the complete de-

feat of the Nawab's troops. He then signed a treaty by which the castle and fleet were made over to the British for a yearly stipend of Rs.200,000. This arrangement was confirmed by the Emperor at Delhi, and the British authority was firmly established in Surat, which was definitely taken over in 1800. In 1842 the last titular Nawab died, and the flag of Delhi was removed from the castle.

The *Castle*, so prominent in the early annals of the British in W. India, stands at the point where the fine Tapti bridge, built under the auspices of Sir Theodore Hope (Magistrate-Collector 1867), abuts on the banks of the river. The castle was built by a Turkish soldier about 1546, and is a brick building with walls about 8 ft. thick, much modernised. There is a good view of the city and river from the S.W. bastion. Over the E. gateway is an inscription, and adjoining it is the well-kept *Victoria Garden*, of 8 acres. The adjoining church was consecrated by Bishop Heber.

The remains of the original *English Factory* are near the way to the Katargam Gate, close to the river, on the N. side of the city. The building is now a private dwelling. Near it is the *Portuguese Factory*, where some records are still kept. A wooden cross marks the site of the church. Close to this are the vacant site of the *French Lodge* and the *Persian Factory*. There is a fine view of the town from the *Clock Tower*.

In the *English Cemetery*, N. of the city, on the Broach Road, is (on the right on entering) the mausoleum of Sir George Oxenden (died 1669), and near it the tomb of his brother Christopher, which has lost its inscription. There are also a number of other large tombs; one is believed to be that of Gerald Aungier (died 1677). Tom Coryat (died 1617) was not buried in the cemetery: a tomb near Suvali at

the mouth of the river, is supposed to be his, and is carefully preserved by Government, but some think he was buried close to the city, and the tomb has probably been destroyed by floods.

The *Dutch Cemetery* is also curious from the great size of the monuments. The most striking is that of Baron van Rheede, the author of the valuable work *Hortus Malabaricus*, and collector of books and curiosities, which he sent to Holland. Near the Dutch cemetery is the Armenian cemetery, with many well-carved stones, having inscriptions in the Armenian language. All the cemeteries are kept in good order at the expense of Government.

The chief Mosques of Surat are—

1. Khwaja Diwan Sahib's Mosque, built about 1530. He is said to have come to Surat from Bokhara, and to have lived to the age of 116.
2. The Nau Saiyad Mosque, "Mosque of the Nine Saiyads," on the W. bank of the Gopi Lake.
3. The Saiyad Idrus Mosque, in Saiyadpura, with a minaret, one of the most conspicuous objects in Surat; it was built in 1639 in honour of the ancestor of the present Kazi of Surat.
4. The Mirza Sami Mosque, built in 1540 by Khudawand Khan, who constructed the castle.

The Tombs of the Bohras deserve a visit. There are two chief Parsi fire-temples, built in 1823. The Hindu sect of the Wallabhacharis has three temples. The Swami Narayan temple, with three white domes, is visible all over the city. In the two old temples in the Ambaji ward the shrines are 15 ft. underground, a relic of Muhammadan persecution. The Shra-vaks, or Jains, have forty-seven temples, the chief of which are from 150 to 200 years old. There are several steam Cotton Mills in Surat. Gold and silver wire and spangle manufacture and brocade

work are important industries; while carved sandalwood and inlaid work are still manufactured to some extent. Silk weaving is the chief "home industry," in which Surat is largely supplanting Benares.

Near the fort the Hope Bridge spans the Tapti, and 3 m. across it is *Rander*, built on the site of a very ancient Hindu city, destroyed by the Muhammadans in the 12th century. The Jami Masjid stands on the site of the principal Jain temple. In the façade the bases of the Jain columns are still visible, and the doorstep is reputed to be a great idol placed head downwards for the faithful to tread on in entering the mosque. In another mosque are the wooden columns and domes belonging to a Jain temple, which are the only wooden remains of the kind in India.

The Tapti Valley Railway runs from Surat to Amalner (147 m.) through Nandurbar; from Amalner a branch of the G.I.P. Railway, 35 m. long, runs to Jalgaon (p. 36).

2 m. after leaving Surat the *Tapti* or *Tapi River* is crossed by a very long bridge, and close to Broach the *Narbada* or *Narmada River* is passed on the finest *Bridge* on the railway, consisting of 25 spans, with a good view on the left of Broach.

From (198 m.) *Ankleswar* a branch runs (37 m.) N.E. to *Nandod*.

203 m. Broach (*Bharoch*) station (R., D.B.), is a place of extreme antiquity (population 43,403). The author of the *Periplus*, 60-210 A.D., mentions Broach under the name of Barugaza. It was then ruled by a feudatory Gurjjara Prince, and subsequently fell under the rule of the Chalukyas. The Moslems appeared in the 8th century, and Broach was ruled by them from 1297 to 1772. In 1613 A.D. it was first visited by Aldworth and Withington, English

merchants; and in 1614 a house was hired for a factory, permission to establish which was granted to Sir Thomas Roe by Jahangir in 1616. The Dutch set up a factory in 1617. In 1686 the Mahrattas plundered Broach. On the 18th of November 1772 the British troops stormed the place with the loss of their commander, General Wedderburn, whose tomb is at the N.W. corner of the fort. On the 29th of August 1803 Broach was again taken by storm by the British.

The *Narbada* here is a noble river, 1 m. in breadth. The city with its suburbs covers a strip of land $2\frac{1}{2}$ m. long and $\frac{3}{4}$ m. broad, hence by its inhabitants it is called *Jibh*, or "the tongue," and its shape is described as "*Paghdī Pahna*," or length like a turban cloth without the proportionate breadth. The *Fort* stands on a hill more than 100 ft. above the river, and a massive stone wall lines the river bank for about 1 m. In it are the Collector's Office, the Civil Courts, the Dutch Factory, the Jail, the Civil Hospital, the English Church and School, the Municipal Office, the Victoria Clock Tower, Sir Shapurji Bharucha Institute, and the Library. The streets of the city are narrow and some of them steep. The *Jami Masjid*, lying at the E. foot of the fort, is constructed of materials taken from a Jain temple, and perhaps on the site of that temple. On the W. end of the thickly populated city is the spacious *Idgah*, or the Muhammadan place of worship on the 'Id holidays, which, it is said, is the largest of the sort on this side of India. Farther on are the bungalows of Government officers and wealthy citizens and the police headquarters. At the farthest end, at the place called "*Kursi*," is the Rothfeld Garden, on the high bank of the river. The view of the low lands of the opposite shore from this place

over the straight broad waters of the smoothly flowing river is specially charming and attractive. On the N.W. side of the city, at a distance of 1 m., is the tomb of Bawa Rahan, and a mosque situated on an isolated high hillock commanding a good view of the surrounding plain and adjoining villages.

The Dutch tombs are 2 m. W. of the fort, and some 100 yds. off the road, left. Two of them are from 16 ft. to 20 ft. high.

Opposite the Dutch tombs are five *Towers of Silence*, one of them about 15 ft. high. The second tower is still in use. Outside the E. gate, on the river bank, is the *Temple of Bhṛigu Rishi*, from whom the town got the name of *Bhṛigukackha*, contracted into *Bharoch*.

Broach is celebrated for its cotton; there are five spinning and weaving mills, employing 2000 hands, besides ginning and cotton-pressing factories. The district, though small, with a population of only 300,000, is the richest in the Presidency.

10 m. to the E. of Broach is the celebrated place of Hindu pilgrimage, *Suklatirth*. It is on the N. or right bank of the *Narbada*, and here *Chanakya*, King of *Ujjain*, was purified of his sins, having arrived at this holy spot by sailing down the *Narbada* in a boat with black sails, which turned white on his reaching *Suklatirth*. Here, too, *Chandragupta* and his Minister *Chanakya*, were cleansed from the guilt of murdering *Chandragupta's* eight brothers, and here *Chamund*, king of *Anhilwada*, in the 11th century, ended his life as a penitent. There are three sacred waters—the *Kavi*, the *Hunkareswar*, and the *Shukal*; at the second is a temple with an image of *Vishnu*. There is a fair here in November, at which 25,000 people assemble. Opposite *Man-gleswar*, which is 1 m. up stream

from Suklatirth, in the Narbada, is an island, in which is the famous *Banyan Tree*, called the *Kabir wad*, or "the fig-tree of Kabir," from whose toothpick it is said to have originated. It has suffered much from floods. Forbes, who visited Broach 1776-83, and was the first Collector of the district, says, in his *Oriental Memoirs* (1, p. 26), it enclosed a space within its principal stems 2000 ft. in circumference. It had 350 large and 3000 small trunks, and had been known to shelter 7000 men. Bishop Heber, in April 1825, says, though much had been washed away, enough remained to make it one of the most noble groves in the world. A small temple marks the spot where the original trunk grew.

228 m. Miyagam junction station. This is a junction of a system of narrow-gauge railways (2' 6") owned by the Gaekwar of Baroda and worked by the B.B. and C.I. Railway.

Dabhoi, 20 m. from Miyagam, is a town belonging to the State of Baroda (population 9117). The ancient Hindu architecture of this place is most interesting, but is little known. A full account of it by Dr Burgess will be found in a volume of the *Archæol. Survey of W. India*. The fort is said to have been built by the Vaghela king of Patan in the 13th century. The *Baroda Gate* is 31 ft. high, with elaborately carved pilasters on either side. The carvings represent the incarnations of Vishnu, and nymphs sporting with makras or crocodiles. Near this are interesting interior colonnades in the fort walls affording shelter to the garrison. The S., or Nandod, Gate is 29 ft. high and 16 ft. 4 in. wide. Trees have grown in the walls and fractured them with their thick roots. The Hira Gate, in the E. face of the town, is 37 ft. high and a marvel of minute carving. About

10 ft. up, in the N. face of the centre, a man and woman are carved, 4 ft. high, standing with a tree between them, like the old representations of Adam and Eve. To the left is the tall figure of a devil, with a ghastly leer. High in the centre face is an elephant, under which the builder of the gate is said to have been interred. On the N. side of the town is what was the palace, in which the law courts now sit. On this side there is a fine tank and the Mori Gate. On the left, looking out from inside the tower, is the temple of Maha Kali, and on the right, beyond the gate and inside it, is a smaller temple, now quite ruined. The former is a wondrous example of carving, which when new must have been very beautiful, but is now much worn by the weather.

From Dabhoi a branch railway runs 10 m. S. to Chandod station, a celebrated place of Hindu pilgrimage, owing to its situation at the confluence of the *Narbada* and the *Or*. Thousands flock there every full moon.

Another line runs 22 m. E. to Bodeli, and a third connects again with the main line of the B.B. and C.I. Railway at Vishvamitri, 245 m. from Bombay. Fifteen m. N.E. of Bahadarpur, on the Bodeli line, is the fortified mountain of *Pawangarh* and the ruined city of *Champanir*.

An interesting expedition may be made to these, but arrangements must be completed beforehand for the trip. Champanir was long the fortress-city of local Rajput Kings. After many vicissitudes it was taken, in 1484, by Mahmud Bigara, of Ahmadabad, who made it his capital, and in 1535 it was besieged by Humayun, Emperor of Delhi. With others he scaled the precipices of the fort by the aid of iron spikes driven into the rock, and opened the gate

to admit his army. There are remains of many mosques, tombs, and tanks in the lower city; and in the forest for miles around may be found the ruins of massive wells, minarets, and palaces, which testify to the former greatness of Champanir.¹

247 m. BARODA * (R.) is the capital of the very important Mahratta State of the Gaekwar, which with its dependencies covers an area of 8570 sq. m., with a population of 2,032,798.

The State was founded by Damaji Gaekwar early in the 18th century; the present chief is H.H. Maharaja Sir Sayaji Rao Gaekwar, G.C.S.I.

W. of the railway station are situated the principal offices of the State and the residences of many high officials, and the State Rest-House (or Baroda Hotel, as it is now called) for guests of H.H., as well as for visitors to Baroda. E. of the station is the city (population 99,345), with the fine College, Museum, the *Marchioness of Dufferin's Hospital*, the *State Offices and Library*, the *Juna Kot*, the *Central Jail*, etc. The *Vishvamitri River* flows W. of the town, and is spanned by four stone bridges, which exhibit great contrasts of style. The city proper is intersected at right angles by two wide thoroughfares, which meet in a market-place, where there is a fine pavilion of Muhammadan architecture, a clock tower, and the old *Nazar Bagh Palace*. Adjoining it is the guard-house, where the gold and silver cannon of the State are kept. They contain 280 lb. weight each of solid gold, and are drawn by splendid milk-white bullocks, stabled hard by. The new *Lakshmi Vilas Palace* cost 27 lakhs of rupees.

Passes to view it must be obtained from the *Khangī Karbari* to H.H. the Gaekwar.

N. of the city are the *Cantonment and Residency*, well laid out with open, well-planted roads. The *English Church* was consecrated by Bishop Heber, 1824, and in 1838 was almost entirely rebuilt. There is a good public garden containing a zoological collection between the Cantonments and the city on the banks of the river.

The palace at *Makarpura* is 4 m. S. of the city. The *Naulakhi Well*, 50 yds. N., is a fine structure of the *Baoli* class, described below.

Baroda is supplied with water from the artificial *Ajwa Lake*, 18 m. distant, completed in 1892 at a cost of 35 lakhs.

The *Baolis*, in Gujarat, are large wells. The following account of these is given by Mr A. Forbes in his interesting work on Gujarat, the *Ras Mala*: "There remain in different parts of the country examples of two kinds. Some are large circular wells containing galleried apartments; others are more properly described as 'wao's,' or 'baolis.'¹ The *wao* is a large edifice, of a picturesque and stately, as well as peculiar, character. Above the level of the ground a row of four or five open pavilions, at regular distances from each other, usually square in the interior, but sometimes, in the larger examples, passing into the octagonal form within, is alone visible; the roofs are supported on columns, and are, in the structures of the Hindu times, pyramidal in form. The entrance to the *wao* is by one of the end pavilions; thence a flight of steps descends to a landing immediately under the second dome, which is

¹ For the architecture of Champanir, Mehmabad, etc., see Burgess's *Mohammedan Architecture of Gujarat* (1896).

¹ A fine model of a *Wao Baoli* at Adalaj (p. 180) may be seen in the Bodleian at Oxford.

now seen to be supported by two rows of columns, one over the other. A second flight of steps continues the descent to a similar landing under the third pavilion, where the screen is found to be three columns in height. In this manner the descent continues stage by stage, the number of the columns increasing at each pavilion, until the level of the water is at last reached. The last flight of steps conducts to the most adorned portion of the *wao*, an octagonal structure, in this position necessarily several storeys high, with a gallery at each storey, and covered by a dome. The structure, which is sometimes 80 yds. in length, invariably terminates in a circular well."

(1) Direct route from Baroda, by broad gauge, to Delhi.

This service of the B.B. and C.I. Railway diverges N.E. to Godhra, 292 m.; Dohad, 337 m.; Ratlam (p. 128), 408 m.; and Nagda, 434 m. Godhra (population 22,144) is the headquarters of the Panch Mahals Dt. Dohad (population 9303) was of note under the Gujarat Kings. In the Panch Mahals District, the fortified hill of Pavagadh, at the foot of which lies the ruined city of Champanir, stands out from the plain of Gujarat and is visible for many miles. The hill is about 1 m. from the Pavagadh station on the Champanir-Shivrajpur Light Railway and is about 34 m. by rail from Baroda. The summit is about 2800 ft. above sea-level and the ascent may be made on foot or in dhoolies.

In the ruined city of Champanir, which surrounds the Pavagadh station, there are several fine ruins of mosques. The Jami Masjid has been restored by the Archaeological Department, and is particularly fine. The Borah Masjid, which is also under repair, is well worth a visit. The height and strength of the part of the city wall

which remains standing give an idea of the importance of the city which was the capital of Sultan Mahmed Begada and his descendants from 1485 to 1535.

In the ascent of Pavagadh there are interesting ruins at the Medi and Medi Talao. Other ruins are the Buria Durwaza and the principal fortifications, the Champavati or Champa Ranina Mahal, which is a sort of summer-house in three storeys down the face of the hill, those near the Machhi Haveli which is half way up, and the gate and fortifications higher up. There is a temple of Bhawani on the summit, which is surmounted by a shrine of Sadan Shah. This shrine of a Muhammadan saint is built on the spire of the Hindu temple, the top of which has been removed to make room for the shrine. It is supposed that this curious arrangement represented the triumph of Muhammadan conquerors over the Rajput Chiefs.

The ruined city of Champanir, with its fine mosques standing amidst the forest which has overgrown the site and the adjoining hill of Pavagadh are well worth a day's visit by travellers stopping in Baroda. There is at present no arrangement for travellers to stop at Pavagadh for the night.

From Nagda the line turns N. and runs to 521 m. Sri Chatrapur, 17 m. from Jhalra Patan, 573 m. Kotah Jn., 754 m. Bharatpur Jn., (p. 218) and 775 m. Muttra Jn. (p. 219), and thence to 865 m. Delhi. At 545 m. Darra it passes through the famous Mokand-darra Pass, from which Colonel Monson made his disastrous retreat in the summer of 1804 before Jaswant Rao Holkar; the scenery here is striking, and the engineering of the line is very remarkable. Kotah (population 32,753) is the capital of the Kotah State, separated from Bundi (p. 134) in 1625, and of which the Chief is Maharao Umed Singh, G.C.I.E., G.C.S.I. It is a

walled city, picturesquely situated on the right bank of the Chambal; the fine old palace and the royal cenotaphs lie S. of it. The new palace is called the Umed Bhawan. There is a fine General Hospital in the city; also a Hospital for Women, named after Queen Victoria. Other attractive public buildings of interest are the Crosthwaite Institute, situated in the beautiful Public Gardens: the Herbert High School; the Curzon Wylie Memorial, and the Girls' School. The beautiful lake above the gardens should be seen. There is a well-furnished and comfortable D.B. at Kotah about 3 m. from the railway station (17 hours from Bombay). There is no hotel. Conveyances for hire meet all the trains. N. of Kotah the railway passes, 641 m., Sawai Madhupur (population 11,166; branch line to Sanganer, p. 198), 681 m. Gangapur, and 708 m. Hindaun, all in the Jaipur state, and the last once a place of importance, but devastated by the Mahrattas, and Bayana (Biana) (p. 248) on the bank of the Gambhir.

(2) Route to Ahmadabad and by metre gauge to Delhi.

269 m. Anand junction station.

(a) One branch line from here runs N.E. to Godhra, 49 m.

At 18 m. (D.B.) **Dakor** station, there are a large lake, and a temple with an image much venerated by the Hindus. As many as 100,000 pilgrims assemble in October and November.

About 20 m. N. of Dakor is the walled town of

Kapadvanj (D.B.), noted for its industry in *soap, glass, and leather jars for "ghi."*

Midway between the two places are the hot springs of **Lassundra**, the highest temperature being 115°. The water is slightly sul-

phurous, and is efficacious in skin diseases.

(b) Another line runs S.W. 15 m. to the town of **Petlad**, and 33 m. to **Cambay**, the capital of the Native State of that name (population 28,028) under the Nawab. The town and port are of great antiquity. In A.D. 913 Cambay is described by the Arab traveller Masudi as standing on the shores of a deep bay surrounded by towns, villages, farms, cultivated fields, trees, and gardens. It was governed by the kings of **Anhilvara** (the modern **Patan**), up to the end of the 13th century. Muhammadan writers of the period call it the "first city in Hind." The beauty and wealth of the country led to its invasion by the Muhammadan Emperor **Ala-uddin** in 1304, when the city was plundered and its temples destroyed.

Cambay reached the height of its glory under the Muhammadans at the latter end of the 15th and beginning of the 16th centuries, and in 1583 letters carried by **Fitch**, **Leedes**, and **Newberry** from Queen Elizabeth, were addressed to Akbar, as king of Cambay. The Portuguese and Dutch had already established factories here; in 1613, when the English appeared, it was still a flourishing city, but commenced to decline as **Surat** increased in importance. In the 18th century it was plundered more than once by the Mahrattas; at the same time the entrance to the harbour began to silt up, and it is now an unimportant place.

Cambay was formerly a stronghold of the **Jains**, and still possesses some of their MSS., second only to those at **Patan**. The **Jami Masjid** (1325) was built with fragments of Jain and Hindu temples.

The town is celebrated for the manufacture of **agate**, **cornelian**, and **onyx** ornaments.

(c) 281 m. Nadiad junction station. A branch line, Nadiad-Kapadvanj Railway (metre gauge) runs N. to Kapadvanj, 27 m. Nadiad is the most important town in this district.

291 m. Mehmabad station. Picturesque view of river from railway station. In the morning and evening troops of grey monkeys play near the line. Mehmabad was founded by Mahmud Bigara in 1479. There is a fine tomb $1\frac{1}{2}$ m. E. of the town, built in 1484 in honour of Mubarak Saiyad, a Minister of Mahmud. "Though small—it is only 94 ft. square, exclusive of the porch—there is a simplicity about its plan, a solidity and balance of parts in the design, which is not always found in these tombs, and has rarely, if ever, been surpassed in any tomb in India."¹ Bigara also constructed the *Bhamara Baoli* well, passed on the way to the tomb. It has two stone arches, on which it was said the king's swing was hung. It is 74 ft. long by 24 ft. broad, is entered by four winding stairs, and has eight underground chambers.

Kaira, 7 m. from Mehmabad, (public conveyances—horse-carriages—ply between them) by a good road shaded by fine trees (population 7399), is the headquarters and one of the largest towns in the district of that name. It consists of two parts, the town proper and the suburbs. Kaira is said to be as old as 1400 B.C. Copper-plate grants show that the city was in existence in the 5th century. The chief industry is printing cloth for saris and other native garments. In the centre of the town is the Court House, a building with pillars of a Greek order. Near it

is a Jain temple, with beautiful dark wood carving. Outside the E. gate is the new Jail. It was formerly of great importance, being on the main route from Cambay to N. India, and the boundary of British possessions. It was a large military Cantonment, but proved so unhealthy for Europeans that the troops were withdrawn. The large church was consecrated by Bishop Heber in 1822, and has a beautiful bell.

Wild hog may still be found in the district, and the Nilgai (*Portax pictus*), antelope (*Antelope bezoartica*), and Indian gazelle (*Gazella Bennettii*) are common. The Sarus (*Ardea Antigone*) is a tall grey crane with a crimson head. Wild-fowl, bustard (*Eupodotis Edwardsii*) and florican (*Sypheotides auritus*), partridges and quails, sand-grouse, plovers and bitterns, pea-fowl and green pigeon, are found everywhere. The Mahsir (*Barbus Mosal*) is found in the Mahi, Vatrak, Meshwa, and Sabarmati, and affords excellent sport with the rod and fly.

310 m. Ahmadabad¹ Jn. * Change to metre-gauge railway for Delhi and stations on C.I. line: also for the two metre-gauge railways (a) to Parantij (b) to Dholka. Headquarters of the Northern Division of the Bombay Presidency.

This most beautiful city, covering an area of 2 sq. m. (216,895 inhabitants), stands on the left bank of the Sabarmati river, in lat. 23° 2', long. 72° 38'. The remains of an old wall, with twelve gateways, surround it.

Ahmadabad, once the greatest city in Western India, is said to have been from 1573 to 1600 the

¹ See Fergusson's *Indian Architecture*, 2, 244.

¹ No one should pass this ancient capital, the stronghold of the Northern Jains, without pausing long enough (four hours) to visit the Jami Masjid, the *Tombs of the Queens*, and the Rani Sipri Mosque.

"handsomest town in Hindustan, perhaps in the world." In Sir Thomas Roe's time, 1615, we are told "it was a goodly city as large as London." It was founded in 1411 by Sultan Ahmad I., who made Asaval, the old Hindu town, now included in the S. part of the city, his capital. It passed through two periods of greatness, two of decay, and one of revival. From 1411 to 1511 it grew in size and wealth; from 1512 to 1572 it declined with the decay of the dynasty of Gujarat; from 1578 to 1709 it recovered under the Mughals; from 1709 to 1809 it dwindled with them; and from 1818 it has again increased under British rule. There are 72 mills in it, employing 42,720 hands.

It is supplied with filtered water obtained from wells sunk in the bed of the river; the main streets are supplied with electric light.

The Cantonment lies $3\frac{1}{2}$ m. N.E. of the city, and is reached by a good road lined by an avenue of trees, the haunt of thousands of parrots. Here there is an English Church, and there is another, Christ Church, in the *Idaria Quarter*, 500 yds. S. of the Delhi Gate.

It is hard to account for Ahmadabad being so little known to modern travellers from Europe. It certainly ranks high amongst the cities of India for the beauty and extent of its architectural remains.¹ Its architecture is an interesting and striking example of the combination of Hindu and Muhammadau forms. "Nowhere did the inhabitants of Ahmadabad show how essentially they were an architectural people as in their utilitarian works (wells—i.e., *Baolis*, and inlets to water reservoirs). It was a necessity of their nature that every object should be made ornamental, and their success

was as great in these as in their mosques or palaces" (see Ferguson's *Ind. Arch.*, 2, 241).

The *Jain feeding-places for birds*, which at the first glance look like pigeon-houses, may be seen in many of the streets, and are a peculiar feature of Ahmadabad; they are extremely picturesque, ornamented with carving, and often gaily painted. Many of the houses in the streets have fronts beautifully ornamented with wood carving.

The old parts of the city are divided into quarters wholly separated off from one another and named "pols."

The buildings in the city may be seen in the following order:—

The Jami Masjid and Tombs of Ahmad Shah and his wives; the Rani Sipri Tomb and Mosque; Dastur Khan's Mosque; the Tin Darwaza; the Bhadar Azam Khan's Palace; Sidi Saiyad's Mosque; Ahmad Shah's Mosque; Shaikh Hasan's Mosque; the Rani (or Queen's) Mosque in Mirzapur; Muhafiz Khan's Mosque.

With a second morning to spare, the visitor should start early and see Sarkhej, across the river to the S.W., giving himself *at least* four hours for the trip. A second afternoon could be devoted to the Kankariya Tank and Shah Alam, S. of the city, and perhaps the modern Jain Temple of Hathisingh, outside the Delhi Gate.

Near the railway station are the handsome lofty minarets and arched central gateway, which are all that remain of a mosque¹ (1) destroyed in the struggle with the Mahrattas in 1753.

The Jami Masjid (3), or *principal mosque*, stands near the centre of the city, on the S. side of the main street (Manik Chauk), a little E. of the Three Gateways. It was built by Sultan Ahmad I.

¹ The amplest details of the architecture of Ahmadabad will be found in a late volume of the *Archaeol. Survey of N. India*, by Dr Burgess.

¹ These numbers in brackets refer to the numbers on the accompanying plan.

(Ahmad Shah) in 1424. Mr Ferugsson says: "Though not remarkable for its size, it is one of the most beautiful mosques in the East" (*Ind. Arch.*, 2, 230). The mosque is entered from the N. by a flight of steps. On the S. is another porch leading into the street, and on the E. is the enclosure, in which is the tomb of the founder. The court is surrounded by a cloister. To the W. is the mosque proper. On the threshold of the main arch, embedded in the pavement, lies a black slab brought from Chintaman's Temple, which, according to Sir T. Hope, is a Jain idol turned upside down for the faithful to tread on; and touching it on the E. is a white marble crescent, where the Imam stands to pray. In the right-hand corner on entering is a gallery, which was probably used by the members of the Royal Family. The roof, supported by 260 columns, has fifteen cupolas, with galleries round the three in front. The centre cupola is larger and much higher than the others. The two minarets lost half their height in the earthquake of 16th June 1819. They are now 43 ft. high.¹ On the marble slab above the centre of the three *kiblas*, or prayer-niches, are these words in Arabic: "This high and far-stretching mosque was raised by the slave who trusts in the mercy of God, the compassionate, the alone-to-be-worshipped." The Koran says: "Truly mosques belong to God, worship no one else with Him." "The slave who trusts in God, the Aider, Nasir-ud-dunya, wa-ud-din Abu'l Fath Ahmad Shah, son of Muhammad Shah, son of Sultan Muzaffar."

Through the E. gate is the Tomb of Ahmad Shah (2) (repaired 1587).

¹ In 1781 Mr Forbes, in his *Oriental Memoirs*, said of them: "A circular flight of steps led to a gallery near the top of each. A little force at the arch of the upper gallery made both minarets shake, though the roof of the mosque remained unmoved."

This domed building has a portico to the S. with eighteen pillars. The windows are of perforated stonework. The central chamber is 36 ft. square. It is paved with marble of different colours. The centre cenotaph is that of Ahmad Shah, the one to the W. is that of his son, Muhammad Shah, and that on the E. is that of his grandson, Kutb Shah, died 1441, 1451, and 1459 A.D.

50 yds. to the E., across the street, are the Tombs of the Queens of Ahmad Shah (2). The houses are so close that they quite shut out the façade of the mausoleum, which is raised on a platform. In the façade are thirteen highly ornamented carved recesses. Inside is a rectangular court, with a corridor running round it. In the centre are eight large cenotaphs and several small ones. The centre tombstone is finely carved, and is the tomb of Mughlai Bibi. It is of black stone or marble, inlaid with white. This building is one of the finest in Ahmadabad, but much out of repair.

Rani Sipri's Mosque and Tomb (4) are almost the most beautiful monuments in Ahmadabad. Rani Asni, by whom the mosque and tomb were really built, was one of the wives of Mahmud Bigara, and they were completed in 1514. "They are the first of a series of buildings more delicately ornate than any that preceded."¹ The mosque has two minarets, about 50 ft. high, having four compartments tapering up to the top. The roof is supported by a row of six coupled pillars with single ones behind. The rauza, or tomb, is 36 ft. square.

Dastur Khan's Mosque (5), built in 1486 by one of Mahmud Bigara's Ministers. The open stone screen-work that shuts in the cloister

¹ Sir T. Hope's *Ahmadabad*.

round the courtyard is very fine. In the gateway the marks of shot may be seen. A few yards to the E. of Dastur Khan's Mosque is *Asa Bhil's Mound*, the site of the fort of the Bhil Chief, from whom the town of Asaval had its name.

A little to the N.E. of the Jamalpur Gate is Haibat Khan's Mosque (6), which is interesting as one of the earliest attempts to combine Muhammadan and Hindu elements. Haibat Khan was one of the noblemen of Ahmad Shah's court. The mosque is very plain. The front wall is pierced by three small pointed arches some distance apart. The minarets are small and without ornament, and rise like chimneys from the roof. The central dome, of Hindu workmanship and of great beauty, is barely raised above the others. The pillars, taken from different temples, display every variety of rich ornament. Except for the form of its dome, the outer porch would suit a Hindu temple.

The Tin Darwaza, or Three Gateways (7), built by Sultan Ahmad I., is of stone richly carved. It crosses the main street a little to the N. of the Jami Masjid. This gateway led into the outer court of the Bhadar, known as the Royal Square, and was surrounded in 1638 by two rows of palm trees and tamarinds (J. A. de Mandelslo's *Voyages*, 1669, p. 76). Facing the Bhadar Gate is a municipal garden. N. of the garden is the Middle School, and to the W. the Hemabhai Institute, with a good library and newspapers and periodicals. W. of this Institute—and by leaving the main road—is the Government Telegraph Office. Near it is the Mosque of Malik Sha'ban, with an inscription that says it was built in the reign of Kutb-ud-din, by Sha'ban, son of

'Imad-ul-mulk, in 856 A.H. = 1452 A.D.

The Bhadar (8), an ancient enclosure or citadel, built by Ahmad Shah, 1411, and named after the goddess Bhadra, a propitious form of Kali, is occupied by public offices. In the E. face is the Palace, built by 'Azam Khan (9), the 23rd Viceroy (1635-42), who was called *Udai*, "the white ant," from his love of building. It is now the Post-Office. S. of the palace are the Civil Court buildings. Over the gate is a Persian chronogram giving the date 1636 A.D. The *N. entrance to the Bhadar* is very handsome. The gate under an archway is 18 ft. high, and opens into a regular octagonal hall of great elegance, containing in the upper storey an arched gallery, having in front a low wall of open-cut stone, and each gallery surmounted by a cupola. Underneath this hall is a fine vaulted chamber, entered by a flight of steps at each side, with a reservoir and fountain in the middle. Close to the Jail is a temple to Bhadra Kali Mata. At the N.E. corner is Sidi Saiyad's Mosque (12), which forms part of the wall, and was till lately the Mamlatdar's office. Two of its windows are filled with delicate stone tracery of tree-stems and branches beautifully wrought. Mr Fergusson, who gives an illustration of one of the windows, says in his *Indian Architecture*, 2, 236-7: "It would be difficult to excel the skill with which the vegetable forms are conventionalised just to the extent required for the purpose. The equal spacing also of the subject by the three ordinary trees and four palms takes it out of the category of direct imitation of nature, and renders it sufficiently structural for its situation; but perhaps the greatest skill is shown in the even manner in which the pattern is spread over the whole

surface. There are some exquisite specimens of tracery in precious marbles at Agra and Delhi, but none quite equal to this."

In the S.W. corner of the Bhardar is Ahmad Shah's Mosque (10), built by him in 1414, twenty years before the Jami Masjid, being perhaps the oldest here. It is said to have been used as the King's private chapel. Left on advancing towards the mosque, was once the Ganj-i-Shahid, or Store of Martyrs, where were buried the Moslems killed in storming the town. The façade is almost bare of ornament, with ill-designed pointed arches. The two minarets are evidently unfinished. The *mimbar*, or pulpit, is adorned with what looks like laurel leaves. The architecture shows the first attempts at building a Moslem edifice in what had been a Hindu city. The pillars still bear Hindu figures and emblems. The N. porch, leading into the latticed ladies' gallery, is Hindu throughout, and may be part of a temple *in situ*.

W. of this mosque is the Manik Burj (11), or Ruby Bastion, built round the foundation-stone of the city. There is a small round tomb in the yard near the Collector's office, which is said to be that of Ibrahim Kuli Khan, a Persian warrior.

Shah Wajih-ud-din's Tomb (13), built by Saiyad Murtaza Khan Bokhari, 11th Viceroy, 1606-1609, is a very beautiful monument.

Saiyad Alam's Mosque (14), was built about 1420 by Abubakr Husaini. The inner details are as rich as Hindu art could make them. S. of this 170 yds. is

The Rani Masjid (Queen's Mosque) (15) in Mirzapur, a few yds. to the S. of the D.B. (now the "Grand Hotel"), built probably in Sultan Ahmad I.'s reign. There are two minarets, unfinished or

partly destroyed by an earthquake, and now only 33 ft. high. The roof has three domes, and is supported by thirty-six pillars. To the N.E. of the mosque is the rauza or tomb (restored). Under the dome are two cenotaphs of white marble; the central one is the tomb of Rupvati, a Princess of Dhar. It is in good preservation, while that on the W. side is much injured; both are ornamented with the chain and censer, a Hindu device. Mr Fergusson, (*Ind. Arch.*, 2, 236) has given a plan of this mosque, and says: "The lower part of the minaret is of pure Hindu architecture. We can follow the progress of the development of this form from the first rude attempt in the Jami Masjid through all its stages to the exquisite patterns of the Queen's Mosque at Mirzapur."

A little to the N. of this mosque is the new Government High School, on the right going N. Opposite the latter, and reached by a bye-street, is a carpet factory, owned by Harilal Bakarbhay & Co., which is worth visiting.

The Mosque of Shaikh Hasan Muhammad Ghishti, in Shahpur (16), is in the N.W. angle of the city, not far from the Sabarmati, 1565 A.D. The minarets are unfinished. "The tracery in the niches of their bases is perhaps superior to any other in the city." On the S. or left side of the central arch is a Persian quatrain. This chronogram gives the date 1566 A.D.

East of the Rani's Masjid the Mosque of Muhafiz Khan (17) was built in 1465 by Jamal-ud-din Muhafiz Khan, Governor of the city in 1471 under Mahmud Bigara. It is the best preserved of all the mosques. According to Sir T. Hope, "its details are exquisite," and the minarets of the mosque and those of Rani Sipri "surpass those of Cairo in beauty."

S. of this mosque is the modern Swami Narayan's Temple (18), finished in 1850. It has an octagonal dome, supported on twelve pillars, and is a fine building.

Close to it is the Pinjrapel, or *Asylum for Animals*. The enclosure is surrounded by sheds, where about 275 animals are lodged. There is also a room where insects are fed. Close to the S. of it are nine tombs, each 18 ft. 3 in. long, called the Nau Gaz Pirs, "the Nine Yard Saints." They are most likely the tombs of a number of men killed in some battle.

The Mosque, Tomb, and College of Shuja'at Khan. This mosque, which stands 400 yds. N.E. of the Lal Gate of the Bhadar, has two slender minarets, and is divided by piers into five bays, and over the kibra are written the creed and date=1695. The walls, up to 6 ft., are lined with marble. The tomb is of brick, with a marble floor, much destroyed. It is called both the Marble and the Ivory Mosque.

Ahmadabad is celebrated for its Handicraftsmen—goldsmiths, jewellers, etc., who carry the *chopped* form of jewellery (the finest archaic jewellery in India) to the highest perfection; copper and brass-workers, as instanced particularly in the very graceful and delicate brass-screens and *pandans* (betel-boxes); carpenters, who have long been famous for their superior carving in *shisham*, or mongrel blackwood, of which the finest specimens are to be found here; stone-masons, lacquer-workers, carvers in ivory—also for the manufacture of "Bombay boxes"; mock ornaments for idols; leather shields; cotton cloth (four monster steam factories); calico-printing, gold-figured silks, and gold and silver tissues; kimkhwab (*kinkhab*), or brocades (the noblest produced in

India; gold and silver lace and thread, and all manner of tinsel ornaments.

Its industrial importance is shown by the fact that "the *Nagar-Seth*," or city lord, of Ahmadabad is the titular head of all the Guilds, and one of the highest personages in the city.

Carpets have also become a speciality of Ahmadabad, and the manufactories as well as the workshops of the other crafts are well worth visiting.

ENVIRONS.—For 12 m. round Ahmadabad the country is full of interesting ruins; but here only the principal can be mentioned. Just outside the Delhi Gate, on the N., is the modern Hathi Singh Temple (19), built of white marble and surmounted by fifty-three domes. This and a rest-house and family mansion close by were finished in 1848, at a cost of Rs.1,000,000. The dimensions of this temple are of the first order; its style the pure Jain; and it stands a convincing proof that the native architecture has not been extinguished by centuries of repression. In its sculptures may be seen representations of the twenty-four holy men, or Tirthankars, and hundreds of other images, all similar, but each labelled on the base with the emblem of some distinct Jain. The entrance is from a courtyard surrounded by a corridor, where woollen slippers are provided before ascending a portico richly carved and supported by pillars. The temple consists of an outer and an inner chamber, both paved with coloured marbles, chiefly from Makrana, in Rajputana: in the latter is the image of Dharmnath, who is represented as a beautiful youth, with a sparkling tiara of imitation diamonds. Mr Fergusson says (*Ind. Arch.*, 2, 66): "Each part goes on increasing in dignity as we approach the sanctuary. The exterior ex-

presses the interior more completely than even a Gothic design; and whether looked at from its courts or from the outside, it possesses variety without confusion, and an appropriateness of every part to the purpose for which it was intended. N.W. of this is the ruined Tomb of Darya Khan (20), 1453, chief Minister of Mahmud Bigara. The dome is 9 ft. thick, and the largest in Gujarat. Near this is a hostel, for students of the R.C. High School, built by the late Sirdar Sir Chinubhai M. Ranchhodlal. Not far beyond it is the *Chhota*, or small *Shahi Bagh*, of no architectural interest, now a private house, occupied by the District Superintendent of Police, where it is said the ladies of the royal harem lived. Across the railway line is the *Shahi Bagh*, a very fine garden-house, now the residence of the Commissioner of the Northern Division. A subterranean passage is said to communicate between the two places. The building was erected in 1622 by Shah Jahan, when Viceroy of Ahmadabad, to give work to the poor during a season of scarcity. In the 16th century this was the great resort for the people of the city. The *Shahi Bagh* is close to the railway bridge over the Sabarmati, which river it overlooks. $\frac{1}{2}$ m. S.W. of the *Shahi Bagh* is *Miyan Khan Chishti's Mosque* (22), built in 1465 by Malik Maksud Wazir; and $\frac{1}{2}$ m. more to the S.W. is *Achyut Bibi's Mosque* (21), built in 1469 by 'Imadu'l mulk, one of Bigara's Ministers, for his wife Bibi Achyut Kuki, whose tomb is close by. There were seven minarets here, all of which were thrown down in the earthquake of 1819. Returning from this point, the drive may be continued to the N.E. side of the city, to Asarva, about $\frac{1}{2}$ m. N.E. of the Daryapur Gate, and close to the Asarva railway station, where are the *Baolis*, or Wells of Dada Hari (23) and *Mata Bhawani*. The real name of

Dada is said by the local people to have been Halim, "mild," and they call him Dada Hari. He is said to have been the husband of the Dai, or nurse of one of the Kings. There is an ascent from the road to the platform which surrounds the well's mouth. A domed portico, supported by twelve pillars, gives entrance to three tiers of finely constructed galleries below ground, which lead to the octagonal well, with inscriptions in Sanskrit and Arabic. The well beyond the octagonal one has pillars round it and a fence wall. Beyond this is a circular well for irrigation. A very narrow staircase leads to the level ground, where by the side of the well are two stone kiosks. About 50 yds. to the W. is *Dada Hari's Mosque*, one of the best decorated buildings at Ahmadabad, though no marble is employed. The stone is of a dull reddish-grey colour. The bases of the two minarets are richly carved; a portion of them was thrown down by the earthquake of 1819. To the N. is the *Rauza of Dada Hari*, or *Halim*. The N. door is exquisitely carved, but the inside is quite plain.

Mata Bhawani (24).—This well is about 100 yds. N. of Dada Hari's, but is much older, and is thought to be of the time of Karan, when Ahmadabad was called *Karanavati*. The descent to the water from the platform is by fifty-two steps and pillared galleries, as at Dada Hari. The porticoes are quite plain, and the well is altogether inferior to that of Dada Hari.

Most of the houses in the *Madhavpura* suburb are warehouses, and it is the great business quarter. *Saraspur*, E. of the railway station, is a distinct walled town, the largest of the suburbs. In this suburb is the Jain Temple of *Chintaman* (25), restored in 1868 by Shantidas, a rich merchant, at a cost of Rs. 900,000. Aurangzeb

defiled it and changed it into a mosque. The Jains petitioned the Emperor Shah Jahan, who ordered his son to repair and restore the temple. But in 1666 Thevenot speaks of it as a mosque (*Voyages*, 5, 28).

$\frac{3}{4}$ m. S.E. of the Raypur Gate is the Hauz-i-Kutb, generally called the Kankariya Lake (26), or Pebble Lake. This reservoir, one of the largest of its kind in this part of India, is a regular polygon of thirty-four sides, each side 190 ft. long, the whole being more than 1 m. round. The area is 72 acres. It was constructed by Sultan Kutb-ud-din in 1451, and was then surrounded by many tiers of cut-stone steps, with six sloping approaches, flanked by cupolas and an exquisitely carved water-sluice. In the centre was an island, with a garden called Nagina, or the Gem, and a pavilion called Ghattamandal. In 1872 Mr Borrodaile, the Collector, repaired the building, and made a road from the Raypur Gate. On the E. bank of the lake are some Dutch and Armenian tombs, Saracenic in style, with domes and pillars a good deal ruined. The dates range from 1641 to 1689.

This expedition may be continued to Batwa, which is almost 5 m. due S. of the Raypur Gate. Here Burhan-ud-din Kutb-ul-Alam, the grandson of a famous saint buried at Uch on the Sutlej, is interred. He came to the court of Sultan Ahmad I., settled at Batwa, and died there in 1452. A vast mausoleum of fine design and proportions was erected to his memory. It resembles the buildings at Sarkhej, but the aisles are arched and vaulted, and the dome is raised by a second tier of arches. The workmanship is most elaborate, but the building is, unfortunately, much out of repair. Adjoining it are a mosque and tank. In this tomb there is a small log of wood, which (it is said)

one night struck the saint's foot. On his calling out and asking whether it was a piece of iron, stone, or wood, or what, the log at once began to contain all the materials mentioned. Many visitors have tried in vain to discover the truth of its substance.

The tomb of Shah Alam, the son of the saint buried at Batwa, is 2 m. S.E. of the town on the Batwa road. Before reaching the tomb the road passes under two plain gateways, and then through one with a Nakkhar Khana (music gallery) above the archway, and so into a vast court. To the W. is the mosque, which has two minarets of seven storeys, handsomely carved and about 90 ft. high. The tomb of Shah Alam is to the E., and is protected by metal lattices; he was a spiritual guide of Muhmud Bigara, and died in 1475. To the S. is an assembly hall, built by Muzaffar III. (1561-72), and partly destroyed by the British in 1780 to furnish materials for the siege of the city. The tomb is said to have been built by Taj Khan Nariali, one of Mahmud's courtiers. Early in the 17th century Asaf Khan (p. 321), brother of the Empress Nur Jahan, adorned the dome with gold and precious stones. The floor of the tomb is inlaid with black and white marble, the doors are of open brasswork, and the frame in which they set, as well as what shows between the door-frame and the two stone pillars to the right and left, is of pure white marble, beautifully carved and pierced. The tomb itself is enclosed by an inner wall of pierced stone. The outer wall in the N. is of stone trellis-work of the most varied design, and here Shaikh Kabir, renowned for his learning, who died in 1618, is buried. The mosque was built by Muhammad Salih Badakhshi. The minarets were much damaged by the earthquake of 1819, but have been

repaired, and are now in good order. To the S. of the mosque is a tomb like that of the chief mausoleum, where the family of Shah Alam are buried. Outside the wall to the W. is a reservoir built by the wife of Taj Khan Nariali, now known as Chandola tank, which has been greatly improved by the Gujarat Irrigation Department, and is now a main source of irrigation.

Sarkhej is 6 m. to the S.W. of the Jamalpur Gate, whence a good carriage will take two people comfortably in about an hour. Sarkhej is served by the railway line to Dholka (p. 180), but the service is not likely to be suitable to visitors. The road crosses the Sabarmati river (the channel of which is about $\frac{1}{2}$ m. broad, but the water in the dry weather is only 2 ft. deep) on a massive iron bridge of fourteen spans, called the Ellis Bridge. On the left bank is the Victoria Garden, of which the site was given by Government to the city, with a marble seated statue of Queen Victoria by Mr G. A. Mhatre. The river-bed is dotted with enclosures for the cultivation of melons, potatoes, and other vegetables, and the running water is lined with gaily-dressed women washing their clothes. Garments of every shape and of the brightest colours are laid out to dry. These persons are not professional washerwomen, but belong to many classes of society. The remains of an old bridge will be seen to the S. of the Ellis Bridge; both the road and the old railway bridges were carried away by the great flood in 1875. Near the bridge the city wall is from 40 ft. to 60 ft. high. Near the other end of the bridge is the Gujarat College. Close by, is the fine building of the Science Institute, built by the late Sirdar Sir C. M. Ranchhodlal. The road on the other side of the river is good,

with rich fields on either side, and at 2 $\frac{1}{2}$ m. left is the massive brick Mausoleum of 'Azam and Mu'azzam, built probably in 1457. These brothers are said to have been the architects of Sarkhej, and to have come from Khorasan. The immense structure which contains their tombs is raised on a platform. About 300 yds. from the principal buildings at Sarkhej there are two brick towers about 30 ft. high, the bases of which, close to the ground, have been so dug away that it seems a miracle they do not fall. After another 200 yds. the road passes under two arches, leading into the courtyard of Sarkhej. To the left on entering is the fine mausoleum of Mahmud Bigara¹ and his sons, and connected with it by a beautiful portico another equally magnificent tomb on the border of the tank for his Queen Rājabai. To the right is the Tomb of the Saint *Shaikh Ahmad Khattu Ganj Bakhsh*, called also Maghrabi. Ganj Bakhsh lived at Anhalwara, and was the spiritual guide of Sultan Ahmad I., and a renowned Muhammadan saint; he retired to Sarkhej, and died there in 1445 at the age of 111, and this magnificent tomb and mosque were erected to his memory. The tomb is the largest of its kind in Gujarat, and has a great central dome and many smaller ones. Over the central door of the tomb is a Persian quatrain. It gives the date 1473 A.D. The shrine inside is octagonal, surrounded by finely-worked brass lattice-windows. The pavement is of coloured marbles, and the dome inside richly gilt; from it hangs a long silver chain, which once reached to the ground. The vast adjoining Mosque is the perfection of elegant simplicity: it has ten cupolas, supported on eighteen rows of pillars. The whole of

¹ Reigned 1459-1513 A.D. Bégara means with horn-like moustaches.

these buildings, says Mr Ferguson (*Ind. Arch.*, 2, 235), "are constructed without a single arch; all the pillars have the usual bracket capitals of the Hindus, and all the domes are on the horizontal principle." S. of the saint's tomb is that of his disciple Shaikh Salah-ud-din.

Mahmud Bigara excavated the great tank of 17½ acres, surrounded it by flights of stone steps, constructed a richly-decorated supply-sluiice, and built at its S.W. corner a splendid palace and harem, which a few years ago were in ruins, but have since been repaired by the Public Works Department.

The Sarkhej buildings form the most beautiful group in Ahmadabad. They belong to the best period of the style, and have the special interest of being almost purely Hindu, with only the faintest trace of the Muhammadan style. Numbers of people used to bathe in the old tank, now dry, in spite of the crocodiles. A little S. of the lake is the tomb of Baba Ali Sher, a saint even more venerated than Ganj Bakhsh. It is small, ugly, and white-washed. Close by are the remains of Mirza Khan Khanan's Garden of Victory, laid out in 1584 after his defeat of Muzaffar III., the last Ahmadabad King. In the 17th century Sarkhej was so famous for indigo that in 1620 the Dutch established a factory there.

From Ahmadabad main station a line branches off to the N.E. to Parantij (41 m.) and Idar (55 m.). The Chief of Idar was Lieutenant-General Maharaja Sir Pertab Singhji, G.C.S.I., G.C.V.O., G.C.B., A.D.C., uncle of the late Maharaja of Jodhpur; he has now retired in favour of his adopted son Daulat Singhji.

Leaving Ahmadabad, the railway crosses the Sabarmati River quite close to the Shahi Bagh on a

fine bridge, which carries the rails for both gauges and a footway on one side.

At 314 m. Sabarmati junction station the narrow gauge continues N. to Delhi, whilst the broad gauge turns W. for Viramgam and Kathiawar (Route 11). There is also a branch line to the S.W. to Dholka (33 m.), passing Sarkhej (above).

The country going N. is flat and well cultivated. The beautiful and celebrated well at Adalaj is in this direction, but can perhaps be more easily visited by road.

353 m. Mehsana junction station. This is one of the most important railway centres in Gujarat, as it is the junction for three branch lines constructed by the Gaekwar of Baroda. They are: (1) a line passing through Visnagar, Vadnagar, and Kheralu, total distance 27 m., general direction, N.E.; (2) a line to Patan, the historic capital of Gujarat, distance 24 m. N.W.; (3) a line to Viramgam, 40 m. S.W., made to connect the Rajputana and Kathiawar metre-gauge lines of railway. (For Viramgam, see p. 200.)

On these branch lines two places only need be noticed here.

Vadnagar, 21 m. N.E. (population 11,228). This place, once very important as the site of Anandpura, is stated to have been conquered by a Rajput Prince from Ayodhya in 145 A.D. There are some interesting ruins, including a very fine Kirti Stambha gateway, and the Temple of *Hatheswar Mahadeo* is worth a visit. It is now the religious capital of the Nagar Brahmans, a most influential class of men in Gujarat and Kathiawar. It was long the chartered refuge of the Dhinoj Brahmans, a class of robbers who were protected and

taxed by successive native governments down to quite a recent date.

Patan, 24 m. N.W. of Mehsana (population 28,339). The city stands on the site of the ancient Anhilvara, capital of the Hindu Kings of Gujarat, which was taken by Mahmud of Ghazni on his way to attack the temple of Somnath in 1024 A.D. The site for generations has been a quarry, whence beautiful carved stones have been carried to other places. It is still famous for its libraries of Jain MSS. There are no less than 108 Jain temples here.

366 m. Unjha station. A town in the Baroda territory, and the headquarters of the Kadwakanbis, a peculiar caste of agriculturists. Marriages among them take place but once in eleven years, when every girl over forty days old must be married on one or other of the days fixed. Should no husband be found, a proxy bridegroom is sometimes set up and married to a number of girls, who immediately enter a state of nominal widowhood until an eligible suitor presents himself, when a second marriage takes place.

374 m. Sidhpur station (population 15,447). It stands on the steep northern bank of the Sarasvati river, and the scene in the bed of the stream during the day in the dry weather is specially gay. The place is of extreme antiquity, and contains the ruins of *Rudra Mala*, one of the most famous ancient temples in W. India. It was wrecked by Ala-ud-din Khilji in 1297, and much of it has been carried off since for building purposes. The stones are gigantic and the carving superb, but very little of it remains. A row of small temples has been converted into a mosque. The more modern temples are very numerous. *Kadi*, the N. division of Baroda, in

which Sidhpur is situated, is the only part of the whole of the Bombay Presidency in which *poppies* are allowed to be grown. The opium is manufactured in Sidhpur at the *State Stores*.

390 m. Palanpur station (R., D.B.). The chief town of a Native State of that name, the residence of a Political Agent. The Palanpur State has a total population of 224,996, having an area of 1766 sq. m., with a total revenue of Rs.729,199. It is a Muhammadan state. [Railway N.W. to the military station of Deesa, on the river Banas, 18 m. distant.]

425 m. Abu Road station * (R., D.B.). Well-built railway quarters, with small native town. Mount Abu looks down on it from the N.W.

The excursion to Mount Abu is one of the most interesting in India on account of the Jain temples. The ascent to it, 16½ m., is by a good road, now practicable for motor cars (cost Rs.34, per seat Rs.6), which should be ordered beforehand by telegram: private tongas, Rs.10, seat in mail tonga, Rs.3, 8as. A bullock-cart for luggage costs Rs.3, as.12. Rooms should be secured beforehand at the Rajputana Hotel (accommodation for fifty persons) or at the Karandas Hotel. The Dilwarra temples can be visited only in the afternoon—pass necessary from the Magistrate, Mount Abu. Though part of the Aravalli range, which runs up to Delhi, Abu is detached from that chain by a valley about 15 m. wide. The plateau at the top is about 14 m. by 4 m., and varies in height from 4000 ft. to 5600 ft.

Mount Abu * (3800 ft. above the sea) is the headquarters of the Rajputana administration, and the residence of vakils, or agents, from a large number of Indian States. It is also a sanatorium for European

troops and a hot-weather resort in the summer season.

At it are the Residency, *Church, Lawrence Asylum Schools* for children of soldiers, *Barracks, Club, Bazar* of shops, and a considerable number of private houses on the margin of the *Nakki Lake*—a most charming piece of artificial water studded with islands, and overhung by a curious rock that looks like a gigantic toad about to spring into the water. A High School for children is outside the station on the plateau. The surface of Mount Abu is very much broken up, and the carriage roads are confined to the civil and military station, but there are many bridle-roads and picturesque foot-paths. The views over the plains from various points are exceedingly fine. The most accessible is called *Sunset Point*, S. of the lake, having a good road to it. An attack was made on the place on 21st August 1857 by mutineers from the Erinpura force but was beaten off.

The Dilwarra Temples, the great attraction of Mount Abu, are reached by a good road (1½ m.). *A pass to visit them is necessary.*

In spite of ill-usage and some very bad restoration in parts, the Dilwarra temples are very beautiful, containing the finest marble-carving in India; they find a fitting framework in their nest of mango-trees, with green fields of barley waving at their feet and high hills surrounding them on all sides.

"The more modern of the two temples is usually ascribed to the same brothers, Tejapala and Vastupala, whose names are associated with the triple temple at Girnar;¹ the inscriptions, however, ascribe the erection and endowment to Tejapala alone.

This, we learn from the inscription, was consecrated in 1230 A.D., and for minute delicacy of carving and beauty of detail stands almost unrivalled, even in the land of patient and lavish labour. It is dedicated to Nemnath, the 22nd Tirthankar.

"The other, built by Vimala, a Minister or governor under Bhimadeva in the year 1031 A.D., is simpler and bolder, though still as elaborate as good taste would allow in any purely architectural object. Being one of the oldest as well as one of the most complete examples known of a Jain temple, its peculiarities form a convenient introduction to the style, and serve to illustrate how complete and perfect it had already become when we first meet with it in India.

"The principal object here, as elsewhere, is a cell lighted only from the door, containing a cross-legged seated figure of the Jina to whom the temple is dedicated—in this instance Rishabhanath, or Adinath. The cell terminates upwards in a sikhara, or pyramidal roof, which in these Abu temples, however, are too low to be properly designated spires. To this, as in almost all instances, is attached a mandapam, or closed hall, and in front of this a portico, in this instance composed of forty-eight free-standing pillars; and the whole is enclosed in an oblong courtyard, 128 ft. by 75 ft. inside, surrounded by a double colonnade of smaller pillars, forming porticoes to a range of cells, as usual fifty-two in number, with some extra chapels at the S.W. corner; these enclose it on all sides exactly as they do in Buddhist viharas. In this case, however, each cell, instead of being the residence of a monk, is occupied by one of those cross-legged images of Jinas which belong alike to Buddhism and Jainism. In other religions there may be a great number of separate chapels attached to one building,

¹ See p. 210.

but in no other would fifty-two be found, as in this example, each containing an image of a Tirthankar, and all so nearly identical as to be almost undistinguishable. With the Jains it seems to be thought the most important point that the Jinās, or saints, are honoured by the number of their images, and that each principal image should be provided with a separate abode. The long beams, stretching from pillar to pillar, supporting the dome, are relieved by curious angular struts of white marble, which, springing from the lower capital, seem to support the middle of the beam." (Fergusson, *Indian Architecture*, 2, 36-38.)

Achilghar is reached by following the road past Dilwarra for about 4 m. to the village of Uria, where there is a bungalow. From this a bad track turns right for another 1 m. to the first temple. It is surrounded by a wall, approached by a flight of steps, and beautifully ornamented. S.E. of this are other temples on higher ground overlooking the valley. The view is magnificent. These are the buildings seen on the right during the ascent from Abu Road. S. of the first temple is a large tank, generally empty. On the bank is a marble image of Pramār with his bow, and near him three large stone buffaloes pierced through the middle. The legend is that this tank was once filled with *ghi*, and these buffaloes came every night to drink it up—till they were all shot through by one of Pramār's arrows. This figure is superior in style and treatment to most; and the same may be said of the statues in other temples around the Hill of Abu, specially of the brass figure at Gaumukh, alluded to below. The Achilghar group is perhaps as attractive as the more renowned temples at Dilwarra, though not comparable in size or finish; but the absence

of modern work, and an air of antiquity, solidity, and repose, make them worthy of all admiration.

Other paths lead to the following sites; the beaten way should not be left without a guide or person who knows the country intimately.

Guru Sikhur, (5630 ft. above the sea), the highest point of Abu. A night should be spent at the Dak Bungalow at Uria, near Achilghar (food and rugs must be brought), and the ascent made in the early morning, with a local guide. A small shrine marks the summit. The view is magnificent.

Gaumukh, a beautifully situated temple 500 ft. down the S.E. slope and 3 m. from the church. There is a brass figure facing the temple. This place is famous for the *Agni Kund*, in which the five tribes of the Rajputs claim to have been created by the gods, in order to counteract the arrogance and tyranny of the Kshatryas. Tod wrongly located this *Agni Kund* at Achilghar). Gaumukh is reached by a path through the hills, behind the High School buildings, along the main road to the plains.

Gautama, on S. side of the hill, W. of Gaumukh; 5 m. from station. Lovely view.

Rishi Krishna, at the foot of the hill, S.E. side, 14 m. from the Civil Station, is easily visited from Abu Road Railway Station.

476 m. from Bombay is Erinpura Road for the Cantonment of the Erinpura Irregular Force, lying 6 m. W. The Jodhpur legion there, in 1857, mutinied on 23rd August, but spared its officers. Two weeks later it defeated the troops of the Jodhpur State sent against them, and finally started for Delhi. It was intercepted on 16th October at Narnaul (p. 351), and defeated by Colonel Gerrard, who lost his life in the engagement.

25 m. S.E. of the railway station is the famous marble temple of

Sadri, which is really at Ram-pura, 5 m. S. of Sadri, built by the Kumbha Rana in 1440, in a lonely and deserted glen running into the western slope of the hills below Kumbha's favourite fort of Kanalm-mer. "Notwithstanding former neglect, it is still nearly perfect, and is probably the most complicated and extensive Jain temple in India, and the most complete for the ritual of the sect" (Fergusson, *Ind. Arch.*, 2, 45-6). It can be visited only by riding, and with the assistance of the officer commanding at Erinpura. It is open to the public, but if previous intimation is received, the Darbar Hakim stationed at Bali can afford facilities. It is under contemplation to connect this part of the country by railway.

528 m. from Bombay is Marwar railway junction station.

Route to Hyderabad, Sind, and Excursion to Jodhpur.

From this point the Jodhpur-Bikanir Railway branches E. to (44 m.) Luni junction, from which a line 309 m. (to Hyderabad) long runs to Balotra junction (50 m.) for the salt-works at *Pachbadra* (100 m. farther on), and on through a desolate country to Hyderabad Sind in 15½ hours, and to Karachi (420 m. from Luni junction) in 21 hours. The through journey from Bombay to Karachi (992 m.) takes 44 hours. A refreshment car is now attached to the trains on this line, which forms the most direct railway route between Bombay and Karachi (steamers between these places take 38 hours).

On the other branch (which runs N. to Jodhpur-Bikanir, etc.) many miles before reaching Jodhpur the fort can be distinguished rising abruptly out of the bare plain.

64 m. from Marwar junction is JODHPUR station (D.B.), the capital

of the Rajput State of that name, and of the country known as Marwar; it is the residence of the Chief and of a Resident. Permission can be had from the Resident to see the fort. There is a good D.B. near the railway station, and carriages and a motor car are available on hire to see the sights of the city and its neighbourhood.

The *State of Jodhpur*, or *Marwar*, covers an area of 35,000 sq. m., with a population of 2,100,000; the revenue of the State is over 80 lakhs. The present Chief is Major His Highness Raj Rajeshwar Maharajadhiraja Sumer Singh Bahadur, K.B.E. The State was founded from Kanauj, after the defeat of the Rathors there in 1211. The city was built by Rao Jodha in 1459, and from that time has been the seat of Government. Maharaja Udai Singh, of the Jodhpur House, and his grandson, Maharaja Gaj Singh, were leading nobles at the Court of the Emperors Akbar and Jahangir; and Maharaja Jaswant Singh commanded the armies of Shah Jahan and Dara Shikoh against the forces of Princes Aurangzeb and Murad in 1658, and died in Kabul, commanding the Imperial Forces there.

The city (population 59,262) stands on the S. end of a range of sandstone hills running E. and W., and is surrounded by a strong wall nearly 6 m. in extent, with seven gates, each bearing the name of the town to which it leads. Some of the houses and temples in the city are of stone richly carved. Amongst the most important buildings are the *Temple* in the Dhan Mandi (grain market), and the *Talaii Mahal*, an old palace now used as the Jaswant Female Hospital.

The Fort stands up boldly some 400 ft. above the city and the plain, and presents a magnificent appearance. The rock is on every side scarped, but especially at the S. end, where the palace is built

on the edge of a perpendicular cliff at least 120 ft. high. Strong walls and numerous round and square towers encircle the crest of the hill. A modern engineered road winds up the neighbouring slopes to a massive gateway. Here is the first of seven barriers thrown across the zigzag ascent, having immense portals with separate guards at each. On the wall of the last are represented the hands of fifteen widows of the Maharajas, who underwent *sati* at their deaths.

At the top of the rock are the highly interesting *Old Palaces*. There are courtyards within courtyards, all solidly built and surrounded by lattice windows of the most delicate and beautiful designs. Here in the *Treasury* are the Maharaja's jewels—a wonderful collection, and well worth seeing. Some of the pearls, emeralds, and diamonds are unusually fine. The silver trappings for elephants and horses should also be noticed. The view from the palace windows is most interesting and extensive, and shows the town nestling under the huge rock.

There was formerly great scarcity of water in the fort, and the women had daily to walk all the way to Mandor (see p. 186) to fetch it, but now it is brought up to the top of the fort in pipes. There is a well in the fort 450 ft. deep. The principal Tanks are—the *Padam Sagar* Tank, in the N.W. part of the city, excavated out of the rock, but of small size; in the same quarter is the *Rani Sagar*, at the foot of the W. entrance into the fort, with which it is connected by outworks, and is chiefly reserved for the garrison and ladies residing in the fort; the *Gulab Sagar*, to the E., is handsomely built of stone, and is capacious, with a smaller one adjoining it; the *Baiji ka Talao*, S. of the city, is extensive, but not capable of holding water long; outside the city 1 m. W. is a lake

called *Akherajji ka Talao*, which is a fine sheet of water—clear, deep, and extensive, resembling rather a natural lake than an artificial tank. The *Kailana* Tank, close to the last-named, is the largest of all, with a capacity of 135 million c. ft. of water. The project owes its conception to Sir Pertab, and is now the greatest storage of drinking-water in Jodhpur. Farther N. is the old Residency, a fortified mansion among the hills. 3 m. N. of the city is the *Bal-Samand*, a pretty tank, with a palace on the embankment and garden below, used by the Maharaja as a summer residence. The canal from it to the city is a work of much importance.

The chief sport near Jodhpur is *pig-sticking*, the pigs being preserved by the Maharaja.

S.E. of the city are the *Raika-bagh* Palace, where H.H. Maharaja Sir Jaswant Singh resided, and the *Jubilee Buildings*, or public offices, near it, designed by Colonel Sir S. Jacob in the Indian style. They are extensive and beautiful, and deserve attention.

The palace of the present Chief is 2 m. farther S., at Ratanada.

The Public Gardens and fine one houses of the officials have now replaced the barren tract that formerly bounded the city on the S. side. These and many other improvements, which have resulted in more than doubling the State revenue, bear the impress of the untiring energy and reforming zeal of the late Prime Minister, H.H. Lieutenant-General Maharaja Sir Pertab Singhji Sahib Bahadur, G.C.S.I., G.C.V.O., G.C.B., LL.D., D.C.L., A.D.C., afterwards Maharaja of Idar, but since May 1911 Regent of Jodhpur State during the minority of the present Chief, H.H. Maharaja Sumer Singh Bahadur. Sir Pertab, the soldier-statesman, is the grand-

uncle of the present Maharaja. For the love that he bears for the Jodhpur State, though it involved a considerable sacrifice, he abdicated the Gadi of Idar in favour of his son, for the purpose of assuming the high office of Regent, so that during the minority of the young Maharaja the schemes which he had inaugurated during his tenure as Prime Minister, and for which Jodhpur has become one of the premier States of Rajputana, might mature, and the improvement thus set in might be steadily maintained.

On the breaking-out of the European War in 1914, both the young Maharaja and the Regent offered, with the Jodhpur Imperial Service Lancers, their services to take active part in the struggle. On their offers being accepted they started for the seat of war, where the Jodhpur Lancers were still fighting in 1917. The young Maharaja was invested with full administrative powers in 1916, when the Regency terminated. Sir Pertab Singhji was still, in 1917, at the front, at the head of the Lancers.

At about $1\frac{1}{2}$ m. outside the N.E. angle of the city is a small walled town of 800 houses, called the **Mahamandir**, or "great temple." The roof of the temple is supported by 100 pillars, and the interior is richly decorated. This town is defended by a stone wall, with a few bastions. In it are two palaces, in one of which the descendants of the spiritual adviser of the late Maharaja Man Singh live. The other is reserved for the spirit of his predecessor, whose bed is laid out in a state chamber, with a golden canopy over the pillow, and has no living occupant. The priests, called *Naths*, have lost nearly all their former prestige.

Mandor.—This was the capital of Marwar before the foundation of Jodhpur. It is situated about

5 m. to the N. of Jodhpur. The place is entered through a gate, which encloses a well-kept garden, used as a picnic ground. To the right are some of the *Chhatris*, or cenotaphs of the former rulers, erected on the spots where the funeral pyres consumed their remains. Some are fine, massive buildings, that dedicated to *Ajit Singh* (died 1724) being the largest and finest. These "proud monuments," as Colonel Tod calls them,¹ are built of "a close-grained free-stone of a dark brown or red tint, with sufficient hardness to allow the sculptor to indulge his fancy. The style of architecture here is mixed, partaking both of the Saivite and the Buddhist, but the details are decidedly Jain, more especially the columns." On the left of the entrance road is a pantheon called the *Shrine of the 300,000,000 gods*, containing a row of gigantic painted figures of divinities and heroes. At the end of the long building where these figures are arranged is a curious fresco of a sea-piece. Near this is the stone palace of *Abhay Singh*, who succeeded *Ajit Singh* in 1724. It is now quite deserted. There are some fine bits of trellis screen-work in the garden. By passing through the garden and climbing up a broken flight of steps, the rocky plateau is reached, the site of the ancient city. It is covered with heaps of debris, in the midst of which is a large ruined temple. Further on are a shabby Moslem shrine, and beyond this a group of *Chhatris* of the relations of the ancient Chiefs. Some are fallen into ruin. Beyond are the *Panch Kund*, or five small tanks, recessed naturally in the rock. Otherwise, little of the old city has left any trace behind.

125 m. W. of Jodhpur lies Jaisalmer, the capital of the Bhati Rajputs of the western desert,

¹ For full details see Colonel Tod's *Rajasthan*.

founded by Jaisal in 1156 A.D. It is famous for buildings constructed of yellow-brown stone, and for its handsome Jain temples. It is only accessible by camel.

128 m. from Marwar junction is **Merta Road** junction for Bikaner and Bhatinda. **Merta**, a fortified Marwar town of some importance, is 9 m. away and connected by a branch line of railway from Merta City Station. Near this town was fought a decisive battle between the Mahrattas and Rajputs, in which the former, with the treacherous assistance of a large body of Pindaris under Amir Khan, inflicted a crushing defeat upon the latter. Near the station is an enclosed Jain monastery, one of the most famous for sanctity.

Excursion to Bikaner.

35 m. from Merta Road is **Nagaur**. A fortified town of importance in Marwar (population 56,000). The crenellated wall, houses, and groups of temples make an agreeable break in the monotonous desert.

107 m. from Merta Road is **Bikaner**, the capital of the Bikaner State in Rajputana. The city was founded in 1488 by Bika, second son of Rao Jodha, of the royal house of Jodhpur, a Rajput of the famous Rathor clan, from whom the present house of Bikaner is descended.

Major-General H.H. Maharaja Sir Ganga Singh Bahadur, G.C.S.I., G.C.I.E., K.C.B., A.D.C., LL.D., was born in 1880, and came to the Gadi in 1887.

The State has an area of about 23,000 sq. m., and a population of about 700,000. The Bikaner country consists largely of desert, and water is only found at a depth of 150 ft. to 300 ft. The population is chiefly agricultural, and a

fine breed of sheep, much valued for their wool, is produced. The Bikaner camels are well known, and the State Camel Corps distinguished itself in China under the command of the Maharaja in 1900, and in Somaliland in 1903-4. It was also sent to Egypt during the War in 1914-15. The climate in the cold months is extremely dry and invigorating. In the city itself and in the large towns reside numbers of wealthy Marwari merchants, who have business connections all over India.

Bikaner is connected with Bhatinda (201 m.) and Merta Road (107 m.) by the Jodhpur-Bikaner Railway. A branch line has also been constructed to Ratangarh (84.79 m.). The State is also intersected by the Degana-Hissar section of the Jodhpur-Bikaner Railway. The Private Secretary to the Maharaja should be addressed for leave to visit the palace.

The city is situated on an elevation, and has an imposing appearance, being surrounded by a battlemented wall, and possessing many fine buildings. It is the fourth largest city in Rajputana. The stone carving with which many of the houses are faced is unique.

The **Fort**, containing the old palaces, lying to the N.E., outside the city, was begun in the 16th century by Raja Rai Singh. It is 1078 yds. in circuit, and the view from outside is picturesque in the extreme. The palace buildings are the work of successive rulers, and are of every style and period. Among the finest are the Chaubara, erected by Raja Rai Singh; the Phul Mahal, the Chandra Mahal, the Gaj Mandir, and the Kachcheri—all built by Maharaj Gaj Singh; and specially the Anup Mahal, dating from the time of Maharaja Surat Singh, and the Chetar Mahal and Chini Burj of Maharaja Dungar Singh, and the beautiful audience hall, called the Ganga Niwas, built by the present

Maharaja, the last being an exquisitely proportioned room of finely carved red sandstone.

The Fort also contains a fine library of Sanskrit and Persian books, and a valuable armoury of ancient European and Eastern arms and armour.

Facing the Fort is the fine Public Park, which has been recently constructed, containing interesting memorials to various persons who have been connected with the State in the past and in recent times. There are also many fine modern buildings in the suburbs, among which the Dungar Memorial College, the (Walter) Nobles' School, the King Edward Memorial Road, and the temples completed by the present Maharaja, may be specially marked. Outside the city the principal buildings are the Maharaja's new Palace, called Lalgarh, a magnificent edifice of carved red sandstone, designed by the late Sir Swinton Jacob, the Victoria Memorial Club, the Public Offices, the King-Emperor's Hall—built to commemorate the visit to Bikaner of the present King, when Prince of Wales—the Ganga Risala Camel Corps Lines, and a large hospital.

5 m. to the E. of the city is Devikund, where the *Chhatris* (cenotaphs) of the rulers of Bikaner are situated.

Other objects of interest are *Bandasar*, a Jain temple in the S.W. corner of the city, and dating from before its foundation. A well, 450 ft. deep, near the Fort, now pumped by electrical power, which also lights the whole camp and suburbs; and *Nagrechiji*, 2 m. S., containing an eighteen-armed image, a relic of Kanauj.

A visit to the carpet and other manufactories at the Central Jail, for which Bikaner is now famous, should also be paid.

By returning to Merta, the main line N.E. may be resumed.

201 m. from Marwar junction is Kuchaman Road. From here a branch of the Rajputana Mahwa Railway runs on (20 m.) to Phalera.

Between Kuchaman Road and Phalera is the *Sambhar Lake*, on the border of the Jaipur and Jodhpur States. The surrounding country is arid and sterile, being composed of rocks abounding in salt, and belonging to the Permian system; and the salt of the lake comes from the washing of these rocks. The bottom is tenacious black mud resting on loose sand. The lake is 21 m. long from E. to W. after the rains, and the average breadth at that time is 5 m. from N. to S., and the depth, 1 m. from the shore, is only 2½ ft. The water dries up from October to June, and leaves about an inch of salt in the enclosures, which are constructed only where the black mud is of considerable thickness.

From the 17th century the salt was worked by the Jaipur and Jodhpur Governments conjointly till 1870, when the British Government became lessee of both States. The works are on the E. and N. edges of the lake. The average yearly out-turn is from 300,000 to 400,000 tons of salt, and the cost of storage and extraction is ¾d. for every 82½ lbs. When the salt is formed men and women of the Barrar caste wade through the mud and lift it in large cakes into baskets, in which it is brought to the depôts on the lake side.

136 m. from Marwar junction is Phalera station, N., junction of C.I. and J.B. Railways (p. 192).

Proceeding from Marwar junction (p. 184) along the main line towards Ajmer, after leaving

33 m. from Marwar junction, 561 m. from Bombay, Haripur station

(D.B.), the line engages in a rocky ascent, which continues to close to

582 m. from Bombay, 54 m. from Marwar junction, Beawar station (D.B.), an important town, and reaches

615 m. from Bombay AJMER junction station * (D.B.), lat. $26^{\circ} 87'$, long. $74^{\circ} 44'$. [From this place a line runs S. to *Nasirabad*, *Chitorgarh*, *Nimach*, *Ratlam*, *Indore*, *Mhow*, and *Khandwa* (see Route 8).]

Ajmer, the key to Rajputana (population 86,222), is the capital of an isolated British District in the Rajput States. The District comprises two tracts known as Ajmer and Merwara (population 501,395). The Agent of the Governor-General for Rajputana, whose headquarters are at Abu, is *ex-officio* Chief Commissioner of Ajmer. The city is of great antiquity and celebrity, and is situated in a valley, or rather basin, at the foot of the rocky and picturesque Taragarh Hill (3000 ft. above the sea). It is surrounded by a stone wall with five gateways, and is well built, containing many fine houses of stone with ornamental façades. Ajmer was founded in 145 A.D. by Ajaypal, one of the Chauhan Kings. It was sacked in 1024 by Mahmud of Ghazni, on his way to Somnath in Kathiawar, taken again by the Muhammadans in 1200, and finally conquered by Akbar in 1556.

The memory of the Ajmer Chishti was held in particular respect by the great Akbar, who was accustomed to pay a yearly visit to his shrine. Several of these pilgrimages were made on foot from Agra and other places. The road from Fatehpur-Sikri to Ajmer was so much used by Akbar that he caused "Kos Minars"

(masonry columns answering to our milestones) to be erected along the route. Several of these minars can still be seen from the railway.

Thomas Coryat, in the 17th century, walked from Jerusalem to Ajmer, and spent £2, 10s. on the journey. Sir Thomas Roe, the Ambassador of James I., gives an account of the city in 1615-16. In about 1720 Ajit Singh Rathor seized the city, which was recovered by Muhammad Shah, and made over by him to Abhay Singh. His son, Ram Singh, called in the Mahrattas, under Jai Appa Scindia, who, however, was murdered, and in 1756 Ajmer was made over to Bijai Singh, cousin of Ram Singh. In 1787 the Rathors recovered Ajmer, but after their defeat at Patan had to surrender it again to Sindhia. On the 25th of June 1818 Daulat Rao Scindia made it over by treaty to the English.

Ajmer is the headquarters of about 1800 m. of metre-gauge railway, worked by the B.B. and C.I. Railway Company. Near the railway station are very extensive workshops employing many thousand Hindu and Muhammadan workmen, who accomplish their tasks with a wonderfully small amount of European supervision.

The Residency is on the brink of the beautiful artificial lake called the Ana Sagar, constructed by Raja Ana in the middle of the 11th century, and lying N. of the city and railway station. It forms the source of the River Luni, which finally unites with the Delta of the Indus. The Emperor Shah Jahan erected a noble range of marble pavilions on the embankment. They were long the only public offices in Ajmer, and the chief one, in which the Emperor often reposed, was used as the official residence of the Commissioner. They have now all been restored by direction

* The Hon. Sir Elliot G. Colvin, K.C.S.I.
in 1917.

of Lord Curzon. The walk along the *band*, or embankment (which is public), is very delightful. To the W. is the broad expanse of the lake, and to the E., under the *band*, is the *Public Garden*. The city is supplied with water from the new lake, the *Foy Sagar*, formed by an embankment thrown across the valley 3 m. higher up.

Akbar's Palace is inside the city, near the E. wall. The entrance gate is very fine. It was once an arsenal, and then used as a *tahsil* building. The central pavilion has been repaired, and is now used as the local museum.

The mosque, called the *Arhai-din-ka-jhonpra*, or "The Hut of two and a half Days," is just outside the S.W. city gate, beyond the *Dargah*. The name is derived from a tradition that it was built supernaturally in two and a half days. It seems to have originally been a Jain College, built in 1153. It was damaged by the Afghans in 1192, and turned into a mosque by building a massive screen or *façade* of seven arches in front of the many-pillared hall. This work was done by Kutb-ud-din in about 1200. The rows of slender pillars are probably *in situ*. Their ornamentation is very complex, no two being alike. The mosque is sadly ruined, and only part of the screen of arches (200 ft. long), and part of the Jain hall behind them, now remain, the whole of the other three sides of the enclosure having disappeared. The work has recently been repaired and is under Government protection. The mosque was very much larger than that at the Kutb near Delhi (p. 275), the measurements of the exterior being 172 ft. by 264 ft., and of the interior quadrangle 200 ft. by 175 ft. The mosque proper measures 259 ft. by 57 ft., and has ten domes in the roof borne by 124 columns. The screen in front of

it is a work well deserving attention; it is the glory of the mosque, and consists of seven arches very similar to those with which Altamsh adorned the courtyard of the Kutb. In the centre the screen rises to a height of 56 ft., and at the corners above this arch rise two short minarets with Tughra inscriptions. Nothing can exceed the taste with which the Kufic and Tughra inscriptions are interwoven with the more purely architectural decorations and the constructive lines of the design.

The bridle-path to Taragarh passes this mosque, and by a steep ascent reaches the summit in 2 m. The view from the top is very fine; but the ascent is somewhat trying, and had better be made in the early morning. There is also an interesting graveyard of Muhammadan martyrs, who fell in the assault of the fort on the top.

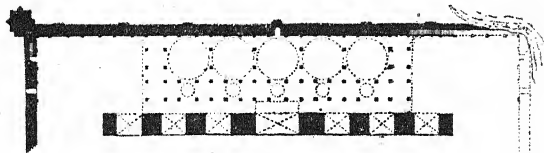
One of the principal points of interest in Ajmer is the *Dargah*, —a most picturesque place—in the S.W. corner of the city which was commenced by the Emperor Altamsh and completed by Humayun. It is venerated alike by Muhammadans and Hindus, and derives its extreme sanctity from being the burial-place of Khwaja Muin-ud-din Chishti, who was called Aftab-i-Mulk-i-Hind, the Sun of the Realm of India. He died in 633 A.H.=1235 A.D. He was the son of Khwaja 'Usman, and was called Chishti from a quarter in the city of Sanjar in Persia. Of this family of saints and courtiers, Farid-ud-din is buried at Pakpattan, in the Panjab; Nizam-ud-din, Kutb-ud-din, and Nasir-ud-din at or near Delhi; Shaik Salim at Fatehpur-Sikri near Agra; and Banda Nawaz at Gulbarga in the Deccan.

Woollen slippers are supplied to be worn over the visitor's boots before entering the *Dargah*. Passing through a lofty gateway, a courtyard is entered, in which are two very large iron cauldrons. Rich

pilgrims and other rich Muhammdans who have not visited Ajmer, pay for a feast of rice, ghi, sugar, almonds, raisins, and spices, to be cooked in one of these, the contents being ladled out and finally scrambled for by various families connected with the shrine, who live near the Dargah in a quarter known as Inderkot, and have a right to perform the ceremony called "looting the deg," which they do forcibly. On the right of the courtyard is a mosque built by Akbar, with drums and candlesticks taken from the army of the famous Daud Dhan Sultan of Bengal, and presented to the mosque by Akbar; and farther on in the inner court is a white marble

At the S. end of the Dargah enclosure is the Jhalra, a deep tank partly cut out of the rock, and lined by steep flights of irregular steps. As at Fatehpur Sikri, the doors of the shrine are covered with votive horse-shoes, nailed there by horse-dealers to commemorate successful deals. There are several doors in the precincts of the Dargah which are plated with silver.

S.E. of the city is the Mayo College, for the education of young Rajput Princes, opened by Lord Northbrook in 1875. It contains about one hundred and fifty boys between the ages of eight and twenty-one years. The central building is a handsome white marble pile; in front of it is a



The Arhai-din-ka-jhonpra Mosque at Ajmer.

mosque, 100 ft. long, and with eleven arches to the front, built by Shah Jahan; a Persian inscription runs along the whole front under the eaves. In the centre of the second court, and opposite the marble mosque, is the *Tomb* of the saint, a square building of white marble surmounted by a dome. It has two entrances, one of which is spanned by a silver arch. S. of it in a small enclosure with well-cut marble lattices, is the Mazar, or "grave" of Hafiz Jamal, daughter of the saint, and W. of it, close by her tomb, is that of Chimmi Begam, daughter of Shah Jahan. All these are considered too sacred to be approached by any one except Muhammdans. There are some very fine trees in the enclosure.

statue of Lord Mayo. The subsidiary buildings have been erected by various States as hostels for the pupils from each State. Perhaps nowhere else in India is so much good modern native architecture to be seen as here. The park round the buildings comprises 200 acres.

The sacred Lake of Pushkar lies about 7 m. W. of Ajmer.

The road skirts the W. shore of the Ana Sagar, and at 3 m. passes the village of Nausar, in a gap in the hills which divide the Ana Sagar from the Pushkar valleys. This striking pass through the hills is 1 m. long. Pushkar, the most sacred lake in India, lies in a narrow valley overshadowed by

fine rocky hills, and is said to be of miraculous origin, marking the spot hallowed by the great sacrifice of Brahma. Already in the 4th century it was one of the most frequented objects of pilgrimage, and is still visited during the great *mela* (fair) of October and November by about 100,000 pilgrims. On this occasion is also held a great mart for horses, camels, and bullocks.

Although the ancient temples were destroyed by Aurangzeb, the five modern buildings, with their ghats on the margin of the lake, are highly picturesque. That to Brahma, at the further end of the lake, is usually said to be the only one in India; but there are smaller shrines to Brahma at several old temples. Over the gateway is the figure of the *hans*, or "goose," of Brahma. The D.B. is in a native house on the lake, from which there is a good view.

658 m. from Bombay is Naraina station. The village, with a large tank, is seen from the railway. It is the headquarters of the Dadupanthi sect of reformers. Their religion, ethics, and teaching are embodied in a mass of poetry written by one Dadu and his disciples. A division of the sect is composed of military monks, who serve in the armies of the Jaipur and neighbouring States.

664 m. from Bombay is Phalera junction (p. 188).

A direct chord line, 134 m. long, runs from Phalera to Rewari (p. 351), while to the W. a branch runs to Kuchaman Road and on to Merta, Bikaner, Jodhpur and Marwar junction.

* 699 m. from Bombay is JAIPUR station * (population 137,098), much frequented by tourists, and furnished with two good hotels and a Dak. Bungalow.

Passes to view the palace at Jaipur, and also the old palace at Amber, must be obtained from the Resident at Jaipur 24 hours beforehand. (The landlords at the hotels obtain the passes.) Carriages for Amber, etc., are available. Amber is the ancient capital, Jaipur the modern; it is the residence of the Maharaja, whose State covers nearly 15,600 sq. m., with a population of 2,660,000, and yields a revenue of 72 lakhs, and the headquarters of the Resident. The present Chief, who is head of the Kachhwaha clan of Rajputs, is Major-General H.H. Maharajadhiraja Sawai Sir Madho Singh, G.C.S.I., G.C.I.E. G.C.V.O., G.B.E., LL.D. Jaipur derives its name from the famous Maharaja Sawai¹ Jai Singh II. (1699-1743), who founded it in 1728. This Chief stood by the son of Prince Azim Shah in the struggle for the Empire on the death of Aurangzeb, and drove the Mughals out of Jaipur; he died in 1743 after a very long reign. The town is surrounded on the N. and E. by rugged hills, crowned with forts. That at the end of the ridge overhanging the city on the N.W. is the Nahargarh, or "Tiger fort." The face of the ridge is scarped and inaccessible on the S. or city side, while on the N. it slopes towards Amber.

A crenellated wall, with seven gateways, encloses the whole city, which is the pleasant healthy capital of one of the most prosperous independent States of Rajputana, and is a very busy and important commercial town, with large banks and other trading establishments. It is a centre of native manufactures, especially those of many kinds of jewellery and of coloured printed cloths and muslins. The enamel-work done here is the best in India, and the cutting and setting of garnets and other stones

¹ Sawai means 12, and was a complimentary title given to Jai Singh by the Emperor of Delhi.

found in the State is an important industry. The crowded streets and bazars are most lively and picturesque. The city is remarkable for the width and regularity of its main streets. It is laid out in rectangular blocks, and is divided by cross streets into six equal portions. The main streets are 111 ft. wide, and are paved, and the city is lighted by gas.¹ At the bottom of the street facing the Tripolia there is a fine collection of tigers, most of which are said to have been man-eaters.

The Maharaja's Palace, with its beautiful gardens and pleasure-grounds, $\frac{1}{2}$ m. long, adorned with fountains, fine trees, and flowering shrubs, occupies the centre of the city and covers one-seventh of its area. The whole is surrounded by a high embattled wall, built by Jai Singh, but many of the buildings included in it are of a later date. The Chandra Mahal, which forms the centre of the great palace, is a lofty and striking building, seven storeys high, looking over the gardens. On the top storey there is a magnificent view over the Centre city. To the left are the gaudily-furnished modern buildings containing the apartments of the Maharaja and his courtiers and the zenana. Close by, to the right, on the ground floor, is the Diwan-i-Khas, or private hall of audience, built partly of white marble, and remarkable even in India, for its noble simplicity.

E. of the Chandra Mahal is the famous Jantra (Yantra), or Observatory, the largest of the five built by the celebrated royal astronomer, Jai Singh, at Benares, Muttra, Delhi, Ujjain, and here. It is not under cover, but is an open courtyard full of curious and fantastic

instruments invented and designed by him. It was constructed between 1718-34 A.D., and has been recently restored by the Maharaja of Jaipur through the agency of Lieutenant A. Garret, R.E., and Pandit Chandradhar Guleri, who have published a most interesting monograph upon it. The principal instruments are, first on the W., the two circular Ram Yantras for reading altitudes and azimuths, with twelve horizontal sectors of stone radiating from a round vertical rod; then E. of these, the twelve Rashivalayas for determining celestial latitudes and longitudes; and next, the great Samrat Yantra, or gnomon, 90 ft. high, situated between two graduated quadrants, with sextants in a chamber outside them. The gnomon's shadow thrown by the sun touches the W. quadrant at 6 A.M., gradually descends this at the rate of 13 ft. per hour till noon, and finally ascends the E. quadrant. To the N. of this is a Dakhshina Bhitti Yantra, or meridional wall, near which is a large raised platform known as Jai Singh's seat, and near it are two brass circles, one of which is a map of the celestial sphere. Between these and the Ram Yantras are a number of other instruments, known as the Kranti Yantra, the Kapali, and the Chakra Yantra, the last being a graduated brass circle corresponding to the modern equatorial. For further details regarding the Observatory, reference must be made to the above publication.

S.W. of the Observatory, and adjoining the Tripolia Gate, are the royal Stables, built round large courtyards; and beyond them, towards the E., is the Hawa Mahal, or Hall of the Winds, built by Madho Singh I., a fantastic and elaborate building, decorated with stucco, and overlooking one of the chief streets of the town.

In the central court of the palace are the Clock Tower and the

¹ See *Letters of Marque*, by Rudyard Kipling.

Armoury. To the E. of the Diwan-i-'Am is the Parade Ground, girt with open colonnades, behind which are the Law Courts.

Near the Tripolia Gate rises the Iswari Minar Swarga Sul, the "Minaret piercing heaven," built by Raja Jai Singh to overlook the city.

The Public Garden, outside the city wall to the S., is one of the finest in India, 36 acres in extent, and was laid out by Dr de Fabeck at a cost of about Rs.400,000.

Attached to it are a fine menagerie and aviary. These gardens cost the Maharaja Rs.16,000 a year to keep up. There is a fine statue of Lord Mayo in them, and in the centre is the Albert Hall—a sumptuous modern building, designed and built by the late Sir S. S. Jacob, K.C.I.E., of which the Prince of Wales laid the first stone in 1876. It contains a large Darbar Hall and a beautiful museum—an Oriental South Kensington—suitably housed. The collections of modern works of art and industry, and also of antiquities, from every part of India are very complete and highly interesting. There is a fine view from the top.

The Mayo Hospital, beyond the gardens, is of rough white stone, with a clock tower. It can house 150 patients.

The foundation-stone of the Lansdowne Hospital for Imperial Service Transport Corps was laid by H.E. the Viceroy and Governor-General on 14th November 1890, and was opened in the year 1891. Its total cost was Rs.29,085. It affords accommodation in two wards for thirty in-patients, and has a large out-patient room, a dispensary, an office, and excellent quarters for the staff, besides a dead-house, etc.

The Imperial Service Transport Corps was raised in 1889 as the contribution of the Jaipur State towards the scheme of Imperial defence, with 1000 ponies, 500 men, and 400 carts. It has since been reorganised. The present strength is 1200 ponies, 776 men and followers, 16 tongas and 570 carts, divided into 11 troops. The Corps has a Commandant in the person of Rai Bahadur Major Dhanpat Rai Sardar Bahadur, C.I.E., who has under him 1 Assistant-Commandant and 11 troop officers.

The Corps saw service in the Chitral Expedition, 1895-6, and in the Tirah Expedition, 1897-8. It also took part in the Delhi Darbar and Coronation Manœuvres, 1902-3; in the Agra Darbar, 1905, held in connection with the visit of H.M. the Amir of Kabul; and again in the Delhi Coronation Darbar, 1911. The services rendered were in each case warmly appreciated and acknowledged by the Highest Authority.

In the great famines of 1899-1900 and 1906, the Commandant of the Corps and his men had the entire charge of the relief operations within the State limits, and relieved on the first occasion some 25,000 sufferers, and on the latter some 9000 people; a great many lives were saved by the prompt and efficient aid rendered by means of ambulance arrangements obtainable in the Corps.

The ambulance arrangement of the Corps consists in an ambulance section maintained in accordance with the regulations of the St John Ambulance Association. The men are all trained and almost all have passed the prescribed test. This ambulance section is capable of carrying at once 700 sick or wounded, and the other carts of the Corps are so made as to be fitted up as ambulances should an emergency arise of removing a far larger number of sick or wounded men.

The organisation of the Corps has been admitted on all hands to be admirable, and is evident of itself from its record.

The annual upkeep charges of the Corps amount to upwards of 3 lakhs.

The Corps is primarily meant for the Imperial defence, and in peace time it is employed all over the capital on odds and ends of other useful duties. The latest achievement of the Corps is the laying out and the construction of a road, since called the "Queen's Road," from the waterworks, Kacha Band to Khatipura, and again from the Khatipura Road to the Ajmer Road, a distance of over 5 m. The road may be called a model one as regards its plan and lay-out, and a drive along it will well repay the trouble.

The ambulance tongas and carts of the Corps were employed during the Delhi Coronation Darbars and the Agra Darbar, and did the work they were called upon to do admirably well. The Corps has done excellent work in the Great War.

The lines lie at the back of the Palace to the N. of the city.

The Transport Gardens, now commonly called the Naya Ghat, were laid out by Rai Bahadur Major Dhanpat Rai Sardar Bahadur, C.I.E., the Commandant of the Corps in 1896, in the bed of the Amnisha Nulla, adjoining the Transport lines, and are more than 2 m. in length. The nulla was reed-grown pestilential swamp before its reclamation was taken in hand, and the Commandant converted the bed into beautiful gardens, partly with the aid of his own men and partly by employing famine labour. Formerly where there was a dense growth of reeds and a filthy stagnation of water—the haunt of the wild animals and robbers—now there stand in its stead extensive gardens, beauti-

fully planned and laid out, along the centre of which flows a fine stream fed by leakage from the waterworks reservoir, winding its course through well-designed artificial lakes made for irrigating the side-gardens.

It is a pleasure-resort for peoples of all nationalities; here Europeans and Indians hold their picnics and outings, for which ample accommodation has been provided in the gardens. In the month of Savan (August) each year a fair is held, and as many as 20,000 people assemble to enjoy the coolness of the rainy season. It is the most agreeable place in Jaipur. The gardens grow all sorts of fruits and fodder.

Jaipur is a centre of the St John Ambulance Association, with His Highness the Maharaja as its President. The Chairman is the Hon. Mumtaz-ud-Daula Bahadur Nawab Sir Faiyaz Ali Khan, K.C.I.E., K.C.V.O., C.S.I., the Chief Minister; and the Secretary is Rai Bahadur Major Dhanpat Rai Sardar Bahadur, C.I.E. Many high officers of the State are members.

The Church is near the hotels and on the way to the railway station, a little to the W. of the road. There is also a R.C. church at Ghat Darwaza.

At the School of Art, a handsome modern building, are first-rate technical and industrial classes for teaching and reviving various branches of native artistic industry—such as metal and enamel-work, embroidery, weaving, etc.

The Maharaja's College.—In Jaipur public instruction has made greater progress than in the other States of Rajputana. The College, founded in 1844 and maintained entirely by the Darbar,

is situated in the city, and is a free institution, no fees of any kind being charged to the pupils. It has a daily class attendance of about 1000 students, both in the college and school departments. It is a first-grade college, being affiliated to the University of Allahabad, up to the M.A. standard in Arts and B.Sc. standard in Science.

The Maharaja's Public Library.—It was founded by a former Maharaja in 1866 for the educated public. It contains English, Sanskrit, Hindi, Persian, Arabic, Urdu, and other books, totalling in all about 19,000 volumes. It is open to the public from 6.30-7.30 A.M. to 9.30-10.30 A.M., and from 2.30-3.30 to 5.30-6.30 P.M. Books are issued to the readers on payment of a subscription from Rs.1 to Rs.6, and a deposit of Rs.10. The College students and professors are allowed a free use of books at the recommendation of the Principal of the Maharaja's College. A committee manages the Library and selects new books to be purchased. It is under the direct control of the State Council, with a librarian in charge.

The Chhatris, or cenotaphs of the Maharajas, at Gethur are just outside the N.E. city wall. They are in well-planted gardens, the trees of which are full of solemn-looking grey-headed monkeys. The first seen on entering is Jai Singh's *Chhatri*—the finest of all. It is a dome of the purest white marble, supported on twenty beautifully carved pillars rising from a substantial square platform, and profusely ornamented with scenes from Hindu mythology. S.E. of Jai Singh's *Chhatri* is that of his son Madho Singh, a dome rising from the octagon on arches reversed. The only ornaments are carved peacocks. W. of this

Chhatri is that of Pertab Singh, his son, completed by a former ruler Ram Singh. It is of white marble brought from Alwar.

The water which supplies Jaipur is drawn from a stream on the W. of the city, running into the Banas. The pumping-station and high-level reservoirs are about 2 m. W. outside the Chandpol Gate.

An expedition for the sake of the view may be made by elephant or on foot a short distance from the E. or Surya Gate, to the *Shrine of the Sun God* at *Galta*—an uninteresting building 350 ft. above the plain, and built on a jutting rocky platform on the summit of a range of hills about 1½ m. to the E. of Jaipur, of which by far the finest view is obtained from this point. The way the sandy desert is encroaching on the town should be noticed. It has caused one large suburb to be deserted, and other houses and gardens are going to ruin.

Behind the temple is a deep gorge filled with temples and sacred tanks shadowed by rugged crags; a paved causeway leads through the ravine which is well worth visiting.

There is also a pleasant drive to a similar gorge along the *Agra Road*, 2 m. E., which is lined with pleasure palaces, gardens, and temples, and a place of frequent resort.

The excursion to Amër (5 m. from the city gate and 7 m. from the hotels), founded in the 11th century, and the capital of Jaipur till 1728, now ruined and deserted, is most interesting, and will occupy a whole morning. A refreshment-room has now been opened here. It was the custom to use an elephant for the last 2 m. of the excursion, but a new, well-engineered road has been constructed, extending all the way to Amër.

On the left of the road a line of fortified hills is passed; these culminate in the great *Fort*, 400 ft.

above the old palace, connected with it and built for its defence. The picturesque situation of Amber at the mouth of a rocky mountain gorge, in which nestles a pretty lake, has attracted the admiration of all travellers, including Jacquemont and Heber. It was founded by the Minas, and was flourishing in 967. In 1037 it was taken by the Rajputs, who held it till it was deserted, in favour of Jaipur.

The Old Palace at Ambèr, begun by Man Singh (1600),¹ ranks architecturally second only to Gwalior, though instead of standing on a rocky pedestal it lies low on the slope of the hill, picturesquely rooted on its rocky base and reflected in the lake below. The interior arrangements are excellent. The suites of rooms form vistas opening upon striking views. It is a grand pile, and though it lacks the fresh and vigorous stamp of Hindu originality which characterises earlier buildings, the ornamentation and technical details are free from feebleness.

Entered by a fine staircase from a great courtyard is the Diwan-i-'Am—a noble specimen of Rajput art, with a double row of columns supporting a massive entablature, above which are latticed galleries. Its magnificence attracted the envy of Jahangir, and Mirza Raja,² to save his great work from destruction, covered it with stucco.

To the right of the Diwan-i-'Am steps is a small temple, where a goat offered each morning to Kali preserves the tradition of a daily human sacrifice in prehistoric times.

On a higher terrace are the Raja's own apartments, entered by a splendid gateway covered with mosaics and sculptures, erected by Jai Singh, over which is the *Sohag Mandir*—a small pavilion with beautiful latticed windows. Through this are further marvels—a green and cool garden with fountains, surrounded by palaces, brilliant with mosaics and marbles. That on the left is the *Jai Mandir*, or Hall of Victory, adorned by panels of alabaster, some of which are inlaid, and others are adorned with flowers in alto-relievo, "the roof glittering with the mirrored and spangled work for which Jaipur is renowned." Near the Jai Mandir a narrow passage leads down to the bathing-rooms, all of pale creamy marble. Above is the *Jas Mandir*, "which literally glows with bright and tender colours and exquisite inlaid work, and looks through arches of carved alabaster and clusters of slender columns upon the sleeping lake and the silent mountains."

At the N.E. angle is a balcony, whence there is a fine view over the town of Ambèr and the plain beyond to the hill which overlooks Ramgarh. Some *Chhatris* outside the wall are those of Chieftains who died before Jai Singh II. In the palace to the right is a chamber, on the right wall of which are views of Ujjain, and on the left views of Benares and Muttra. That opposite the Jai Mandir is called the *Sukh Niwas*, "Hall of Pleasure." In the centre of the narrow, dark room is an opening for a stream to flow down into the groove or channel which runs through the hall. The doors are of sandal-wood inlaid with ivory.

A steep path leads down to the Khizri Gate, beyond which, as it leads to one of the forts, Kantalgarh, no one is allowed to pass without an order. At the bottom of this path there is a temple to Thakurji, or Vishnu. It is white

¹ Man Singh was the nephew of Raja Bhagwan Das, the friend of Akbar.

² Raja Jai Singh I., nephew of Man Singh, was known by this title.

and beautifully carved, and just outside the door is a lovely square pavilion exquisitely carved with figures representing Krishna sporting with the Gopi milkmaids.

Ambèr formerly contained many fine temples, but most are now in ruins.

Sanganer, about 7 m. to the S. of Jaipur, also deserves a visit, and may be reached by a nice drive past the Residency and the Moti Dongari, or by the railway from Jaipur to Siwai Madhupur (p. 170).

The road into the town is through two ruined Tripolias, or triple gateways of three storeys, about 66 ft. high. The second storey has an open stone veranda, supported by four pillars on either side of the archway. On the right ascending the street is a small temple sacred to *Kalyanji*, or *Krishna*, the door of which is handsomely carved. Opposite is a temple to Sitaram, with a pillar, 6 ft. high, of white Makrana marble, called a Kirtti Khambh. On the four sides are Brahma, with four faces; Vishnu, cross-legged, holding the lotus; Siva, holding a cobra in his right hand and a trident in his left, with Parvati beside him and Ganesh.

Higher up, on the left, are the ruins of the *Old Palace*, which must once have been a vast building. N. by E. from this is the *Sanganer Jain Temple*, with three courts, and finely-carved marble work. Visitors are not allowed to enter the third.

755 m. from Bombay is Bandikui junction station (R.). Here are railway workshops, church institute, and a considerable station for railway employes. The line for *Bharatpur junction*, *Muttra junction*, and *Agra* branches off E. (see Route 12).

ALWAR (792 m. from Bombay), is the capital of the Indian State of that name, founded in 1771 by Maharao Raja Pratap Singhji. It has an area of 3185 sq. m., and a revenue of about 8 lakhs. The capital (population 44,085) is beautifully situated on rising ground, dominated by the Fort, which crowns a conical rock and is backed by a range of mountains. The present ruling Prince, Lieut.-Col. His Highness Raj Rajendra Sri Siwai Maharaj Sir Jey Singhji Veeendra Shiromani Deo, K.C.S.I., K.C.I.E., is by race a Naruka Rajput of the Kachhawa clan. He is descended from the Surya-bansh (the Solar dynasty), and belongs to the ancient royal family of Ambèr (now in Jaipur).

'Palaces.—The Moti Doongri Palace, built on a hill, 1 m. to the S. of the railway station, is the Royal residence of the present ruling Prince. It is surrounded on all sides by fine gardens and beautiful lawns. There are other palaces in the capital, one of them being the Vinai Vilas Palace, named after the late Maharao Raja Vinai Singhji and now used for His Highness's Government Offices. The city palace is at the very end of the city and consists of a group of buildings partly detached, and built in a variety of styles, separated from the base of the mountain by a very picturesque tank. The handsome Shish-Mahal (Glass-room) overlooks the tank. This palace contains a valuable *Library*, kept in excellent order, and rich in Oriental manuscripts.

Eminent Sanskrit and Persian scholars from Western countries keenly seek this library for taking copies of ancient manuscripts. One of the principal ornaments in the collection of this library is a matchless *Gulistan*, which cost about £10,000 to produce; it is beautifully illustrated with miniature paintings. It was finished in

1848 by the order of Siwai Maharao Raja Vinai Singhji. Another beautiful book is the *Dah Pand*, written in 1864.

The *Armoury* contains a splendid collection of sabres and other weapons finely wrought and finished and studded with jewels; also of handsome swords with hilts of gold. Dozens of these swords are from Persia, while many of them were made at Alwar, in imitation of the Ispahan steel. The arms of Maharao Raja Vinai Singhji (1815-57) could only be worn by a man of great stature. Permission to visit these palaces must be obtained from His Highness's Minister in charge.

The "*Sagar*" (tank), with the buildings that surround it and the fort in the background, forms one of the most picturesque spots in India. To the E. are the palace buildings, on the W. are a number of temples and shrines shrouded by trees; and raised upon the centre of a platform on the S. is the cenotaph of the late Maharao Raja Bakhtawar Singhji (1781-1815). The plinth is made of red sandstone and the cenotaph itself of beautiful marble. Visitors who care to enter this building have to take off their shoes. Myriads of pigeons fly about these sacred precincts, and numbers of stately peacocks strut unmolested about the stone pavements.

The *State Stables* are well worth a visit.

In the city the house may be visited in which the Elephant carriage is kept. It was built by Maharao Raja Vinai Singhji, and is used by the present ruling Prince on the Dussera Festival. It is a car two storeys high, and can carry fifty persons. It is usually drawn by four elephants.

There is little to see at the *Fort*, but the view from this great height

of all the city below and the surrounding country interspersed with lakes, is quite magnificent. The ascent is steep, and is paved with slippery and rugged stones. At a point about 150 ft. up, the steepest part of the ascent begins. It is called the *Hathi Mora*, "Elephant's turn," because hitherto these animals could not go beyond this point; now a motor road is being made right up to the top of the hill. Behind the fort, at a distance of 1 m., is the *Chhatri* of the late Maharao Raja Pertab Singhji, the Founder of the throne of Alwar, and, alongside it, is a small monument of his Queen Consort who became *sati*.

The tomb of Fateh Jang, a Minister of Shah Jahan, near the station, on the Bharatpur road, is a conspicuous object with an immense dome, and bears the date, in Nagri, 1547; the outside is poor in design compared with the interior. The building possesses a considerable amount of fine plaster-work in relief, with flat surface patterns and rectangular mouldings.

1 m. N. of the city is the *Jail*, and 2 m. to the S. is the Artillery Ground and Top Khana, "Artillery Arsenal."

Alwar and its outskirts are supplied with water from Siliserh lake, 6 m. S.W. of the city. A new masonry dam, about $\frac{1}{2}$ m. long, and 4 m. from the Moti Doongri hill, has been constructed, at a cost of Rs. 8 lakhs to impound water from the Ruparel river. The water stored by this masonry dam, amounting to some 1100 millions of c. ft., forms a splendid reservoir, covering an area over 4 sq. m. It is known by the name of "*Jey Samand Lake*," named after the present reigning Prince, and is ornamented with beautiful *Chhatris* (domes).

There is plenty of small game, including panthers, in the neighbourhood of Alwar, while the State Forests abound in tigers: but they are reserved as Royal game. Shooting licences can be obtained

on application to the Army Minister.

The State maintains Imperial Service troops, consisting of 601 cavalry, and 926 infantry, which is the mobilised unit strength in peace times. The infantry regiment took part in the China Expedition in 1900-1, and carries the reputation of being one of the best drilled regiments in India. Since the outbreak of the present European War both the regiments have gone on active service in the field, taking part in France, Egypt, the N.W. Frontier of India, etc.

The *Feelkhana* (Elephant Dept.) is another interesting institution for visitors to see. There are altogether thirty elephants, skilfully trained for purposes of big-game shooting.

The *Purjan Vihar* (Garden).—This is a beautiful public park on the outskirts of the town. In the centre of this park is a fine summer-house, with picturesque fountains and beautiful ferns.

There is also a small menagerie in this park, consisting of lions, tigers, panthers, and bears.

The Dak Bungalow is about 100 yds. from the railway station. Carriages from the State Stables are available on hire by application to the "Munsarim Buggikhana."

20 m. E. of Alwar, and adjoining the Mewati hills, is the battlefield of Laswari, where Lord Lake annihilated the Deccan battalions of Daulat Rao Scindia's European trained army on 1st November 1803, the British losses being 172 killed and 652 wounded, and the Mahratta losses 5000 to 7000. Later events have unduly obscured the achievements of this great British leader, who within a space of two months, and with a force never exceeding 8000 men, crushed 31 battalions of Scindia's troops in four pitched battles, captured

426 guns, took two fortresses (Aligarh and Agra), and entered the capital of India (Delhi) as a conqueror.

ROUTE II.

From AHMADABAD through KATHIAWAR by Viramgam, Kharaghoda, Wadhwan, Bhaunagar, Junagadh, Girnar, Somnath, Porbandar, Rajkot, and back to Ahmadabad, with expedition by road to Palitana.

Leaving Ahmadabad (Route 10), 310 m. from Bombay, the Sabarmati is crossed on a fine bridge, with a footway for passengers alongside, and carrying the rails for both broad and narrow gauges. From 4 m., Sabarmati (junction station), on the N. bank of the river of that name, the narrow gauge continues N. to Delhi and Agra, whilst the broad gauge turns W., and passing through a well-cultivated country, reaches 40 m. Viramgam junction station, *—a walled town (population 20,769). The Mansar Tank dates from the end of the 11th century. It is shaped like a shell, and surrounded by flights of stone steps; round the tops of the steps runs a row of small temples, in the sides

of which there are holes, through which it is believed a rope used to pass, enabling a worshipper to ring the bells in all the temples at once. The inlet is much ornamented. The neighbourhood abounds in black buck, grouse, and all manner of water-fowl. From this place a branch line runs N.W., passing at 18 m. Patri (D.B.), a small walled town with a citadel; and, at 23 m. reaches Kharaghoda, where there are very extensive salt-pans on the edge of the Little Ran (Runn) of Cutch.¹ In the dry season the Ran presents the appearance of a hard, smooth bed of dried mud, and may be ridden over at any place. There is absolutely no vegetation except on some small islands which rise above the level of the salt inundation; the only living creatures that inhabit it are some herds of wild asses, which feed on the lands near its shores at night, and retreat far into the desert in the daytime. With the commencement of the S.W. monsoon in May the salt water of the Gulf of Cutch invades the Ran, and later in the season the rivers from Rajputana pour fresh water into it. The sea is now encroaching rapidly on the Ran at its junction with the Gulf of Cutch, and there is reason to suppose that serious changes of level are taking place. The centre of the Ran is slightly higher than the borders, and dries first. The railway has many sidings extending into the Ran, to facilitate the collection of the salt, which is stacked at the station in very large quantities under the custody of the Salt Customs Department. Originally it was considered necessary to erect expensive roofs over the salt stacks, but experience has shown that this can be dispensed with.

¹ Bhuj, the principal town of Cutch, renowned for the work of its silversmiths, lies on the N. side of the Ran, and is at present difficult of access. Ran means a desert. The Great Ran lies N.W. of Bhuj.

The salt is evaporated by the heat of the sun from brine brought up in buckets from depths of 15 ft. to 30 ft. Wonderful mirages are seen in the Ran, and in the winter season the flights of flamingoes and other birds are extraordinarily large. There are sand grouse to be had round about.

80 m. from Ahmadabad is Wadhwan junction station (D.B.). To the W. runs the *Morvi State Railway*, to the N. the *Dhrangadhra State Railway*, and to the S. the *Bhaunagar State Railway*—each on the metre-gauge system, and the property of their respective States. To the S. the line is continued by means of the *Gondal-Forbandar Railway*, which opens up a large tract of country in S. Kathiawar. To the W. the *Morvi Railway* runs to *Morvi Rajkot*; thence the *Jamnagar State Railway* runs to *Jamnagar* and the *Jetalsar Rajkot Railway* to *Jetalsar*, where it crosses the *Gondal-Forbandar* line. The *Junagadh Railway* runs from *Jetalsar* to *Veraval via Junagadh*, and from *Junagadh* to *Visavadar*. All the railways in *Kathiawar* are managed by States or combinations of States.

The *Civil Station of Wadhwan*, on which the railway station is built, is land rented by Government in perpetuity from the Wadhwan State, for the location of the establishments necessary for the administration of the N.E. portion of Kathiawar. A small town has sprung up close to the railway station. The Civil Station is connected with Wadhwan city by a horse tramway and by the *Bhaunagar Railway*.

At the *Talukdari School* the sons of *Girassias*, or land-owners, are educated when their parents are unable to afford the heavy cost of sending them to the *Rajkumar*, or *Princes' College*, at *Rajkot*. In many cases elder brothers are placed at the *Rajkumar College* and the younger at the *Talukdari*

School. Dhrangadhra, on the *Dhrangadhra State Railway* running from Wadhwan to Halwad, is the capital of the Dhrangadhra State. The ruler, H.H. Sri Sir Ghanshyamsinhji, K.C.S.I., is the head of the clan of Jhala Rajputs. Since his accession in 1911 the State has made great progress in all directions.

The *Province of Kathiawar* consists of 188 separate States, ranging in extent from considerable tracts of country, with Chiefs enjoying great executive freedom, to mere village lands, States only in name. Most of the capitals of these States will repay a visit.

The Province is divided into *four Prants*, or divisions. The task of administering it is entrusted to the Agent to the Governor, who resides at *Rajkot*, and has assistants, called *Political Agents*, distributed through the country.

Everywhere in Kathiawar there are long lines of *paliyas*, or memorial stones, peculiar to this Province, on which men are usually represented as riding on a very large horse, whilst women have a wheel below them to indicate that they used a carriage. A woman's arm and hand indicate here, as elsewhere in India, a monument to a *sati* lady.

Proceeding S. by the Bhaunagar State Railway, the river is crossed close to the station.

At 83 m. Wadhwan City station is reached. The town wall is of stone and in good order. Towards the centre, on the N. wall, is the ancient temple of *Ranik Devi*. She was a beautiful girl, born in the Junagadh territory when Sidh Raja was reigning at Patan, and was betrothed to him. But Ra Khengar, who then ruled Junagadh, carried her off and married her, which caused a deadly feud between him and Sidh Raja, whose troops marched to Junagadh. Khengar was betrayed by two of his kinsmen, and was slain

by Sidh Raja and his fortress taken. The conqueror wanted to marry *Ranik Devi*, but she performed *sati*, and Sidh Raja raised this temple to her memory. It bears marks of extreme old age, the stone being much worn; all but the tower is gone. Inside is a stone with the effigy in relief of *Ranik Devi*, and a smaller one with a representation of *Ambaji*. N. of this temple, and close to the city wall, is a *sati* stone dated 1519. Near the Lakhupol Gate is a well with steps, ascribed to one *Madhava*, who lived in 1294 A.D.

The *Palace* is the centre of the town, has four storeys, and is 72 ft. high. It stands in a court facing the entrance, on the right of which is a building called the *Mandwa*, where assemblies take place at marriages. There is a new Palace called the *Balchandra Vilas*, built by the late *Thakore Sahib Bal-sinhji*.

96 m. Limbdi station—chief town of the cotton-producing Limbdi State (population 11,039): a well-cared-for place, with a very handsome Palace, which was seriously damaged by a great fire in 1906.

126 m. Botad station. Frontier of the Bhaunagar State.

153 m. from Ahmadabad is Dhola junction station (R.). Here the line turns W. to Dhoraji and Porbandar by the *Gondal-Porbandar State Railway*, and E. to Bhaunagar by the *Bhaunagar State Railway* passing at

165 m., a little N. of Songad, * the residence of the Political Agent for the Eastern portion of the Province.

Excursion to Palitana and the Satrunjaya Hills.

Palitana, * railway terminus station on the *Sihor-Palitana* section, 17 m. from Sihor, is much

enriched by the pilgrims who reside in it during their visit to the *Holy Mountain* and its famous Jain temples. Since the death of the last Thakore Sahib, in 1905, the State is under British administration owing to the minority of the present Thakore Sahib. There is a State Paddock, where breeding from pure Kathi stock is carried on.

The distance from Palitana to the foot of Satrunjaya, or the *Holy Mountain*, 1977 ft. above sea-level, is 1½ m. The road is level, with a good water supply, and shaded. The ascent begins with a wide flight of steps, guarded on either side by a statue of an elephant. The hillside is in many places excessively steep, and the mode of conveyance is a *dholi*—a seat or tray 18 in. square, slung from two poles and carried by four men. Few of the higher-class pilgrims are able to make the ascent on foot, so there is an ample supply of *dholis* and bearers.

The Satrunjaya Hill is truly a city of temples, for, except a few tanks, there is nothing else within the gates; there is a cleanliness about every square, passage, porch and hall, that is itself no mean source of pleasure. The silence, too, is striking. Now and then in the mornings a bell sounds for a few seconds, or a drum is beaten for as short a time, and on holidays chants from the larger temples meet the ear; but generally during the afternoon the only sounds are of vast flocks of pigeons that fly about spasmodically from one temple to another. Paroquets and squirrels, doves and ringdoves abound, and peacocks are occasionally met with on the outer walls. The top of the hill consists of two ridges, each about 350 yds. long, with a valley between. Each of these ridges, and the two large enclosures that fill the valley, are surrounded by massive battlemented walls fitted for defence. The buildings on both ridges, again, are divided into

separate enclosures called *tuks*, generally containing one principal temple with varying numbers of smaller ones. Each of these enclosures is protected by strong gates and walls, and all gates are carefully closed at sundown.

No attempt is made to describe the shrines in detail; their general character is so often repeated that it would only be possible to do so with the aid of profuse illustrations. The area enclosed on the top is small enough for any one of ordinary activity to see all over it in a two hours' visit. Dr Burgess's book on the place is excellent.

There is one gate leading into the enclosure, but there are nineteen gates within, leading to the nineteen chief temples. Not far from the *Ram-pol* ("*pol*" means gate) is a resting-place used by persons of distinction, with a tolerable room surrounded by open arches. There is no accommodation for ordinary European visitors.

Mr James Fergusson says¹—

"The grouping together of their temples into what may be called 'Cities of Temples' is a peculiarity which the Jains practised to a greater extent than the followers of any other religion in India. The Buddhists grouped their stupas and viharas near and around sacred spots, as at Sanchi, Manikyala, or in Peshawar, and elsewhere; but they were scattered, and each was supposed to have a special meaning, or to mark some sacred spot. The Hindus also grouped their temples, as at Bhubaneswar or Benares, in great numbers together; but in all cases, so far as we know, because these were the centres of a population who believed in the gods to whom the temples were dedicated, and wanted them for the purposes of their worship. Neither of these religions, how-

¹ *Ind. and East. Arch.*, 2, 24.

ever, possesses such a group of temples, for instance, as that at Satrunjaya, or Palitana, as it is usually called from the neighbouring town, in Gujarat. It covers the two summits of the Satrunjaya Hill, each about 360 yards long, with the depression between them. They are grouped in separate enclosures called *tuks*, surrounded by high battlemented walls, each having at least one principal temple, with varying number of smaller ones around it. The number of temples and small shrines number over 500. It is a city of the gods, and meant for them only, and not intended for the use of mortals.

"All the peculiarities of Jain architecture are found in a more marked degree at Palitana than at almost any other known place, and, fortunately for the student of the style, extending over a considerable period of time. Some of the temples may be as old as the 11th century, but the Muslim invaders of the 14th and 15th centuries made sad havoc of all the older shrines, and we have only fragments of a few of them. In the latter half of the 16th century, however, the Jains obtained tolerance and security, and forthwith began to rebuild their old fanes. From 1500 they are spread pretty evenly over all the intervening time down to the present century."

Dr James Burgess, in his report, gives the following general description:—

"At the foot of the ascent there are some steps with many little canopies or cells, $1\frac{1}{2}$ ft. or 3 ft. square, open only in front, and each having in its floor a marble slab carved with the representation of the soles of two feet (*charan*), very flat ones, and generally with the toes all of one length. A little behind, where the ball of the great toe ought to be, there is a diamond-shaped mark divided into four smaller figures by two

cross lines, from the end of one of which a curved line is drawn to the front of the foot.

"The path is paved with rough stones all the way up, only interrupted here and there by regular flights of steps. At frequent intervals also there are rest-houses. High up we come to a small temple of the Hindu monkey-god, Hanuman, the image bedaubed with vermilion in ultra-barbaric style. At this point the path bifurcates, to the right leading to the Northern peak, and to the left to the valley between, and through it to the Southern summit. A little higher up, on the former route, is the shrine of Aengar, a Musalman *pir*, so that Hindu and Muslim alike contend for the representation of their creeds on this sacred hill of the Jains.

"On reaching the summit of the mountain, the view that presents itself from the top of the walls is magnificent in extent; a splendid setting for the unique picture. To the E. the prospect extends to the Gulf of Cambay near Gogo and Bhaunagar; to the N. it is bounded by the granite range of Sihor and the Chamardi peak; to the N.W. and W. the plain extends as far as the eye can reach. From W. to E., like a silver ribbon across the foreground to the S., winds the Satrunjaya River, which the eye follows until it is lost between the Talaja and Khokara Hills in the S.W."

Excursion to Valabhipur.

The antiquarian may care from Songad to visit the site of the ancient city of Valabhipur, which is nearly identical with the modern town of Wala, 12 m. distant by road. The authorities at Songad will arrange for the journey. Valabhipur, the capital of all this part of India, was perhaps as old as Rome. The present town (under 5000 inhabitants) is the capital of a small Kathiawar State. It has been

very much neglected. There are scarcely any architectural remains at Wala, but old foundations are discovered, and sometimes coins, copper plates, mud seals, beads, and household images have been found in some abundance. The ruins can be traced over a large area of jungle.

Resuming the railway route from Songad to Bhaunagar, the traveller passes, 90 m. from Wadhwan, **Sihor** station (D.B.). This was at one time the capital. The town, $1\frac{1}{2}$ m. S. of the railway, has interesting Hindu temples. There is a branch line running between Sihor and Palitana (17 m.). The name is a corruption of "Singhpur," "the lion's city"; a still more ancient name is "Saraswatpur." It is famous for copper and brass work, snuff and plaster (chunam). Near the S. wall is situated Brahma Kund, the water of which possesses special virtue for the bather. Farther up the River Gautami lie the Gautam Kund and Gautameswar Mahadev.

104 m. from Wadhwan the terminus is at **Bhaunagar**. * The city, of 60,694 inhabitants, founded 1723, stands on a tidal creek that runs into the Gulf of Cambay. It has a good safe harbour for shipping of light draught, and carries on an extensive trade, as one of the principal markets and harbours of export for cotton in Kathiawar. The Bhaunagar State has from its first connection with the British Government been administered by men of intelligence, and the town will be found a most pleasing sample of the results of native Indian government going hand in hand with European progress. The staple export is cotton. There are no interesting ruins, but abundance of very handsome modern buildings on Indian models, water-

works, reservoirs, and gardens; and at the port will be seen an intelligent adoption of modern mechanical improvements.

To visit Junagadh, Somnath, Porbandar, or any places in the W., it is necessary to return to *Dhola junction* and change there for *Jetalsar via Dhasa*. From Dhasa there is a branch line to Kundla (23 m.), constructed by the Bhaunagar State, which communicates with the Baroda territory and several *Mahals* of the Bhaunagar State, including its Port of Mahuva.

Jetalsar junction station (R.), 153 m. from Wadhwan, is the residence of the Political Agent for the S. or *Sorath* Division of the Province of Kathiawar. Here the line branches (1) S. to *Veraval* for *Somnath*; (2) W. to *Porbandar* (p. 215); and (3) N. to *Rajkot*, *Wankaner*, and *Wadhwan* (p. 202).

(1) *Jetalsar to Junagadh and Veraval.*

17 m. from Jetalsar is **Junagadh** station, * (D.B. W. of the town, opposite a modern gateway, called the *Reay Gate*), the capital of the State, and the residence of the Nawab. The name means Old Fort. Population 35,413. The State is under a British administrator, the Nawab being a minor.

From Junagadh a branch line is opened up to Visawadar. There is also a line between Shahpur (a station between Junagadh and Veraval) and Saradia for Kutiana *via* Bantwa (20 m.). The Bantwa Taluka is owned by Babi Musalmans of the same clan as the Nawab of Junagadh.

Situated as it is under the Girnar and Datar Hills, Junagadh is one of the most picturesque towns in India, while in antiquity and historical interest it yields to few. The scenery from the hills around

is most pleasing, and the place has attractions wanting in most ancient Indian towns, which, as a rule, are situated in uninteresting plains. There is much game in Kathiawar, and specially in the Gir, the large wild tract to the S.E. of Junagadh; but the Gir is very unhealthy in the early autumn, and again at the beginning of the rains. The few lions left are strictly protected.

The fortifications of the present town were all built by the Muhammadans after the capture of the place by Sultan Mahmud Bigara, of Gujarat, about 1472. The *Nawab's Palace* is a spacious pile of buildings with the Haveli and Darbar Kacheri Hall opposite. The latter is worth a visit. In front of the Darbar is a fine circle of shops with the Aiyena Mahal on the E. Entering the Reay Gate from the station we come to the Orphanage, Jail, and Law Courts, and opposite the latter is the modern "Mukbara," or mausoleum, of the Nawabs adjoining the public mosque. Further on lie the new Civil Hospital and Zenana Hospital recently built. At the four cross roads adjoining lies the old Mukbara, containing the tombs of the Nawabs, a highly finished building. Mr Fergusson says: "There is a cemetery at Junagadh where there exists a group of tombs all erected within last century, some within the last forty or fifty years, which exhibit, more nearly than any others I am acquainted with, the forms towards which the style was tending. This style is not without a certain amount of elegance in detail. The tracery of the windows is frequently fascinating from its beauty, and all the carving is executed with precision and appropriateness; but it is all wooden." Entering the enclosure by the N. gate, the tomb of Bahadur Khan II. is in front on the left, next to it the tomb of Hamad

Khan II., and on its left that of Laidibu Bibi. Beside these is the tomb of Nawab Mahabat-Khan, in Saracenic style, and finely carved. The tombs of Bibi Najobibi and her notorious servant, Chaitibu, are to be found at Bara Saiyad in another quarter of the town, and will repay a visit.

Outside the town lies the new suburb containing the Official Residence, a Gymkhana, the Arts College, the Huzur Offices, the Imperial Service Lancers Lines, the well-known Junagadh quarries and a new High School still under construction. The College was designed and built by a local architect and contains a very fine hall. It was opened by Lord Curzon in November 1900. Both in and outside the walls many improvements have been carried out during the recent years of Administration. State Departments and Institutions are efficiently housed and managed, and roads have been widened and improved. The State maintains separate guest-houses for Europeans and Indians of status.

The State Gardens, Moti Bag, Sardar Bag, Lal Bag, the new Diagonal Garden and the Sakar Bag are a great feature of the place. They have recently been restored and laid out and are very picturesquely situated. The Zoological Collection, including Gir lions successfully bred in captivity, has now been housed in Sakar Bag, 1 m. to the N. of the State Paddock, where the famous Kathi breed can be inspected with advantage. There are no tigers in the Kathiawar peninsula, but up to the middle of the present century lions inhabited all the large jungles, and were shot in the Choteyla Hills E. of Rajkot. Now the animal is confined to the Gir. The lion is in no way inferior to the African species, although the mane is not so large and is sometimes absent. The Gir lion is not a man-eater usually, but there

¹ *Ind. and East. Arch.*, 2, 331.

are one or two well-authenticated instances of his killing men.

The soft sandstone which everywhere underlies Junagadh is formed apparently in very shallow water, showing on all sides complicated lines of stratification. The facility with which it is worked may be one reason why it has been largely excavated into cave-dwellings in Buddhist times.

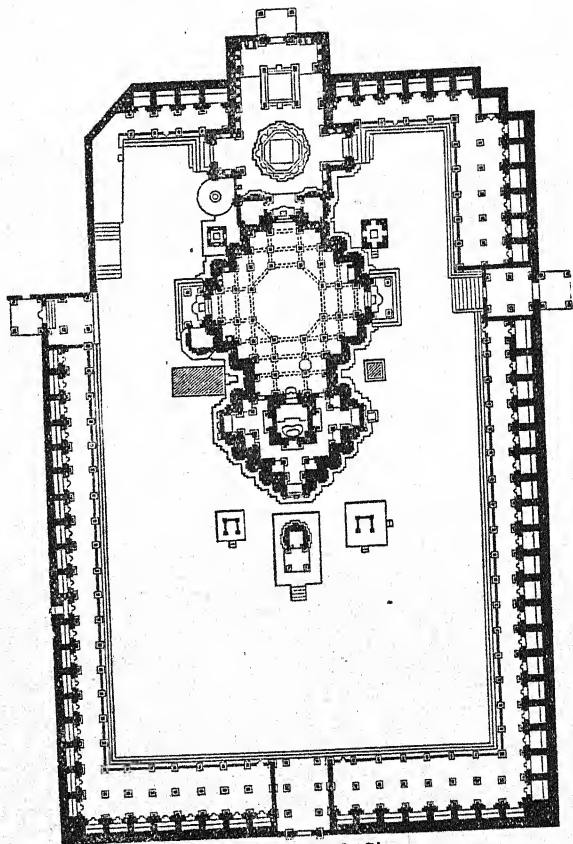
The Caves.—In the N. part of the town enclosure, near the old telegraph office, is the group called the *Khapra Khodia*. These caves appear to have been a monastery, and bear the cognisance of the then ruling race—a winged griffin or lion. They appear to have been two or three storeys high. They are excavated in good building stone, and the modern quarrymen have been allowed to encroach and injure them; but they have recently been cleaned out and built up with supporting masonry. The most interesting caves of all are in the Uparkot (see below) about 50 yds. N. of the great mosque. They are now protected by an iron gate. They consist of two storeys, the lower chambers being 11 ft. high. The upper storey consists of a tank surrounded by a corridor, and of a room 36 ft. by 28 ft., supported by six columns, beyond which is a small kitchen. From here a winding staircase leads to the lower storey, measuring 39 ft. by 31 ft., with broad recesses all round it, and over them a frieze of chaitya windows. Of the columns, Dr Burgess says: "Few bases could be found anywhere to excel in beauty of design and richness of carving those of the six principal pillars." Inside the Waghewari Gate, through which the Girnar Mount is reached, are the caves known by the name of *Bawa Piara*—a comparatively modern Hindu ascetic who is said to have resided in them. These

caves date from about the time of Asoka (272-231 B.C.), are among the very oldest in all India, and are nearly all small and plain. They are situated in the scarp of a circular detached mass of rock, and face S. and E., a third line to the N., also facing S., being excavated on a higher level than the S. line. Facing E., a number of caves were dug round a central space.

The Uparkot, on the E. side of the city, used as a jail until 1858, is now practically deserted, though modern waterworks are now located on its S. aspect. It was the citadel of the old Hindu Princes, and is probably the spot from whence Junagadh derives its name. Without presenting any very special features, the Uparkot is a most interesting old fort. The parapets on the E., where the place is commanded by higher ground, have been raised at least three times to give cover against the increasingly long range of projectiles. The views from the walls are delightful. Here were quartered the lieutenants of the great Asoka, Buddhist King, and later of the Gupta Kings. The entrance is beyond the town in the W. wall, and consists of three gateways, one inside the other. The fort walls here are from 60 to 70 ft. high, forming a massive cluster of buildings. The inner gateway, a beautiful specimen of the Hindu Toran, has been topped by more recent Muhammadan work, but the general effect is still good and, with the approach cut through the solid rock, impressive. On the rampart above the gate is an inscription of Mandalika V., dated 1450. About 150 yds. to the left, through a grove of *sitaphal* (custard apples), may be seen a huge 10-in. bore cannon of bell-metal, 17 ft. long and 4 ft. 8 in. round at the mouth. This gun was brought from Diu, where it was left by the Turks. There is an

Arabic inscription at the muzzle, which may be translated: "The order to make this cannon, to be used in the service of the Almighty, was given by the Sultan of Arabia and Persia, Sultan Sulaiman, son

called Chudanal, also from Diu, in the Southern portion of the fort, is 13 ft. long, and has a muzzle 4 ft. in diameter. Near this is the Jami Masjid, evidently constructed from the materials of a Hindu



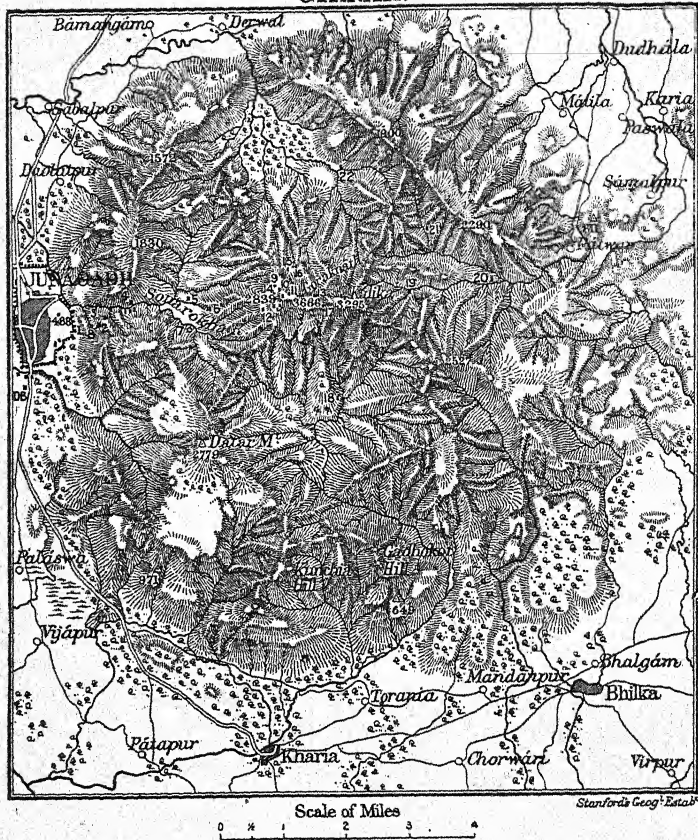
Temple of Nemnath, Girnar.

of Salim Khan. May his triumph be glorified, to punish the enemies of the State and of the Faith, in the capital of Egypt, 1531." At the breech is inscribed: "The work of Muhamman, the son of Hamza." Another large cannon

temple built by Mahmud Bigara. The mosque is much ruined.

The Tomb of Nuri Shah, close to the mosque, is ornamented with fluted cupolas, and a most peculiar carving over the door. There are

GIRNAR.



- | | |
|------------------------|-----------------------------------|
| 1. Wagheshwari Gate. | 12. Māliparab Khund. |
| 2. Asoka's Stone. | 13. Datātari. |
| 3. Bridge. | 14. Hāthi pagla Khund. |
| 4. Temple of Damodar. | 15. Sesawan Temple. |
| 5. " " Savanath. | 16. Hanmandhāra Khund and Temple. |
| 6. " " Bhavanath. | 17. Kamandal Temple. |
| 7. Chād-ni-wao Well. | 18. Sakri āmbil. |
| 8. Wagheshwari Temple. | 19. Malbela. |
| 9. Bhairo-Thumpa. | 20. Suraj Khund. |
| 10. Gaomukhi Temple. | 21. Sarkharia. |
| 11. Amba Deva Temple. | 22. Bawaha Madhi. |

GIRNAR.



Scale of Miles

Stanford's Geog. Atlas

- | | |
|------------------------|-----------------------------------|
| 1. Wagheshwari Gate. | 12. Māliparab Khund. |
| 2. Asoka's Stone. | 13. Datātari. |
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| 8. Wagheshwari Temple. | 19. Malbela. |
| 9. Bhairo-Thumpa. | 20. Suraj Khund. |
| 10. Gaomukhi Temple. | 21. Sarkharia. |
| 11. Amba Deva Temple. | 22. Bawaha Madhi. |

two Wells in the Uparkot—the *Adi Chadi*, said to have been built in ancient times and named after slave girls of the Chudasama rulers, is descended by a long flight of steps (the sides of the descent show the most remarkable overlappings and changes of lie in the strata, for which alone it is worth a visit to any one with geological tastes); and the *Naughan*, cut to a great depth in the soft rock, and with a wonderful circular staircase.

There is a fine dharmasala belonging to the goldsmiths near the Waghewari Gate.

The mountain Girnar is the great feature of Junagadh, and the Jain temples upon it are amongst the most ancient in the country. It is 3666 ft. high, and is one of the most remarkable mountains in India. From the city of Junagadh only the top of it can be seen, as it has in front of it lower hills, of which Jogniya, or Laso Pawadi, 2527 feet, Lakhshman Tekri, Bensla, 2290 ft. high, and Datar, 2779 ft. high, are the principal. Girnar was anciently called Raivata, or Ujjayanta, sacred amongst the Jains to Nemnath, the 22nd Tirthankar, and doubtless a place of pilgrimage before the days of Asoka (272-231 B.C.).

The traveller, in order to reach Girnar, will pass through the Waghewari Gate, which is close to the Uparkot. At about 200 yds. from the gate, to the right of the road, is the Temple of Waghewari, which is joined to the road by a causeway about 150 yds. long. In front of it is a modern temple, three storeys high, very ugly, flat-roofed, and quite plain. About a furlong beyond this is a stone bridge, and just beyond it, on the right, is the famous Asoka Stone, a round boulder of granite, measuring roughly 20 ft. by 30 ft., and covered with inscriptions, which prove on examination to be

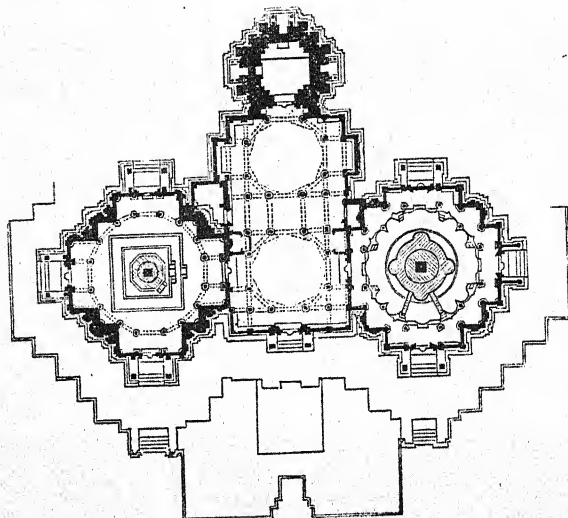
fourteen Edicts of Asoka (250 B.C.).¹ Nearly identical inscriptions have been found at Dhauri and Shahbazgarhi (pp. 450 and 336) and elsewhere. The character is Pali.

On leaving Asoka's Stone the route crosses the handsome bridge over the Sonarekha, which here forms a fine sheet of water, then passes a number of temples, at first on the left bank of the river and then on the right, where Jogis go about entirely naked, to the largest of the temples dedicated to Damodar, a name of Krishna, from Dam, a rope, because by tradition his mother in vain attempted to confine him with a rope when a child. The reservoir at this place is accounted very sacred. The path is now through a wooded valley, with some fine Indian fig-trees. Near a cluster of them is an old shrine called Bhavanath, a name of Siva, and round it are a number of large monkeys, who come on being called. Most persons who are not active climbers will probably proceed up the mountain in a swing *dholi* (p. 203), for which Rs. 4 or Rs. 5 will be paid, according to tariff. A long ridge runs up from the W., and culminates in a rugged scarped rock, on the top of which are the temples. Close to the old shrine is a well called the Chadani-wao. The paved way begins just beyond this, and is now continuous from the foot of the hill up the precipice and over the three peaks. The way is paved with dressed granite blocks, with parapets and easy steps, and now presents no danger. The first R.H., Chodaparaba, is reached 480 ft. above the plain, and the second halting-place, at Dholi-deri, 1000 ft. above the plain. From here the ascent becomes more difficult, winding under the face of the

¹ See *Life of John Wilson, F.R.S.*, by Dr G. Smith, for picture and account of the stone; or Mr Burgess, *Second Archaeol. Rep.*

precipice to the third R.H., 1400 ft. up. So far there is nothing very trying to any one with an ordinarily steady brain. But from this point the path turns to the right along the edge of a precipice, which, though improved of late, is still very narrow, so that the *dholi* almost grazes the scarp, which rises perpendicularly 200 ft. above the traveller. On the right is seen the lofty mountain of *Datar*, covered with low jungle.

and farther on the much larger one of *Vastupala* (see below). Built into the wall on the left of the entrance is an inscription in Sanskrit. Some sixteen Jain temples here form a sort of fort on the ledge at the top of the great cliff, but still 600 ft. below the summit. The largest temple is that of *Nemnath* (see plan, p. 208), standing in a quadrangular court 195 ft. by 130 ft. It consists of two halls (with two porches, called by the



Temple of Tejpala and Vastupala, Girnar.

At about 1500 ft. there is a stone dharmasala, and from this there is a fine view of the rock called the *Bhairav-Thampa*, "the terrific leap," because devotees used to cast themselves from its top, falling 1000 ft. or more.

At 2370 ft. above Junagadh the gate of the enclosure known as the *Deva Kota*, or *Ra Khengar's Palace*, is reached. On entering the gate the large enclosure of the temples is on the left, while to the right is the old granite temple of *Man Singh*, Bhoja Raja of Cutch,

Hindus *mandapams*), and a shrine, which contains a large black image of *Nemnath*, the 22nd Tirthankar, with massive gold ornaments and jewels. Round the shrine is a passage with many images in white marble. Between the outer and inner halls are two shrines. The outer hall has two small raised platforms paved with slabs of yellow stone, covered with representations of feet in pairs, which represent the 2452 feet of the first disciples. On the W. of this is a porch overhanging the perpendicu-

lar scarp. On two of the pillars of the mandapam are inscriptions dated 1275, 1281, and 1278—dates of restoration, when Dr Burgess says it was covered with a coating of chunam, and "adorned with coats of whitewash" within. The enclosure is nearly surrounded inside by 70 cells, each enshrining a marble image, with a covered passage in front of them lighted by a perforated stone screen. The principal entrance was originally on the E. side of the court; but it is now closed, and the entrance from the court in Khengar's Palace is that now used. There is a passage leading into a low, dark temple, with granite pillars in lines. Opposite the entrance is a recess containing two large black images; in the back of the recess is a lion rampant, and over it a crocodile in bas-relief. Behind these figures is a room from which is a descent into a cave, with a large white marble image, an object of the most superstitious veneration by the Jains, which the priests usually try to conceal. It has a slight hollow in the shoulder, said to be caused by water dropping from the ear, whence it was called *Amijhera*, "nectar drop." In the N. porch are inscriptions which state that in Samvat 1215 certain Thakurs completed the shrine, and built the Temple of Ambika. After leaving this there are three temples to the left. That on the S. side contains a colossal image of Rishabha Deva, the 1st Tirthankar, exactly like that at Satrunjaya, called Bhim-Padam. On the throne of this image is a slab of yellow stone carved in 1442, with figures of the 24 Tirthankars. Opposite this temple is a modern one to Panchabai. W. of it is a large temple called *Malakavisi*, sacred to Paras-nath. N. again of this is another temple of Parasnath, which contains a large white marble image canopied by a cobra, whence it is called *Sheshphani*, an arrange-

ment not unfrequently found in the S., but rare in the N. It bears a date=1803. The last temple to the N. is *Kumarapala's*, which has a long, open portico on the W., and appears to have been destroyed by the Muhammadans, and restored in 1824 by Hansraja Jetha. These temples are along the W. face of the hill, and are all enclosed. Outside, to the N., is the Bhima Kunda, a tank 70 ft. by 50 ft., in which Hindus bathe. Immediately behind the temple of Nemnath is the triple one erected by the brothers *Tejapala* and *Vastupala* (built 1177). The plan is that of three temples joined together. The shrine has an image of Mallinath, the 19th Tirthankar. Farther N. is the temple of *Samprati Raja*. This temple is probably one of the oldest on the hill, date 1158. *Samprati* is said to have ruled at Ujjain in the end of the 3rd century B.C., and to have been the son of Kunala, Asoka's third son. S. of this, and 200 ft. above the Jain temples, is the *Gaumukhi Shrine*, near a plentiful spring of water. From it the crest of the mountain (3330 ft.) is reached by a steep flight of stairs. Here is an ancient temple of Amba Mata, which is much resorted to by newly-married couples of the Brahman caste. The bride and bridegroom have their clothes tied together, and, attended by their male and female relations, adore the goddess and present cocoanuts and other offerings. This pilgrimage is supposed to procure for the couple a long continuance of wedded bliss. To the E., not far off, are the three rocky spires of the Gorakhnath, the Nemnath or Gúrdattáraya, and the Kalika peaks.

S.E. of the Kalwa Gate of Junagadh is the Shrine of *Jamal Shah*, or *Datar*. After passing under a low arch near the city, the house of the Mujawir, or attendant of the shrine, is seen in front. To the right is a stone platform

surrounding an unusually fine mango - tree, with a tank just beyond, and the shrine of Datar, a building 30 ft. high with a fluted cone at top. Here it is necessary for a visitor to take off his shoes. The shrine and the whole place are very attractive.

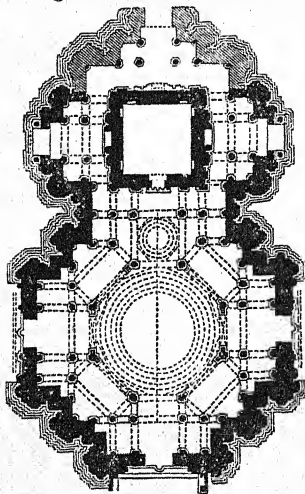
There is a Leper Asylum near the Datar Temple for 100 lepers of both sexes, built at the expense of the Wazir Sahib Bahu-ud-din. H.R.H. Prince Albert Victor laid the foundation-stone in 1890. Above it, 4 m. in S.E. direction, is the *Datar Peak* (2779 ft.). On the summit of the hill is a small shrine, and from it a very beautiful view. The hill is held sacred by Muhammadans and Hindus alike, and is supposed to have a beneficial effect on lepers, who repair to it in considerable numbers.

67 m. from *Jetalsar* is *Veraval* station. The railway terminus is on the W. side of the city (population 15,563), close to the walls, and about $\frac{1}{2}$ m. from the lighthouse at the landing-place. This is a very ancient seaport, and probably owes its existence to its more celebrated neighbour *Patan Somnath*. It rose into notice during the time of the Gujarat Sultans, and in their reigns became, until superseded by Surat, the principal port of embarkation for Muhammadan pilgrims to Mecca. It is still a flourishing little seaport. In the Temple *Harsad Mata* is a celebrated inscription (1264), recording that a mosque was endowed in that year and bearing dates in four different eras. It was from this inscription that it was discovered that the Valabhi era commenced in 319 A.D. and the Sri Singh era from 1113 A.D. The River *Devka* flows to the N. of Veraval, and joins the sea at a place called *Dani Baru*. The *Jhalesvar Temple*, about 2 m. N.W. from the town, at the mouth on the right bank, is of great antiquity. Half-way to it, on the

sand dunes, is the R.H. of the *Junagadh State*. On the S.W. face of Veraval there is a modern sea-wall and a stone pier with a lighthouse. Harbour works have recently been constructed with a breakwater and foreshore pier; on the completion of the latter there has been a corresponding increase of trade. An additional railway line, with two branches running E. and N.E. from Verawal, is now under construction, and will serve to open up this part of the State. A large *Custom House* has been built on the sea face, and near it is a *dock estate*, established on reclaimed land.

On the sea-shore, nearly 3 m. to the S.E., is *Patan Somnath*, also known as *Prabhas Patan*, or *Deva Patan*, the *Semenat* of Marco Polo. There is a horse tramway between Veraval and Patan Somnath. The anchorages at Veraval and Patan are so bad that it is hard to account for the undoubted fact that from the earliest times they carried on a trade with the Red Sea, Persian Gulf, and African coast. The place is renowned in Hindu mythology. It was here the Jadaavs slew each other, and here Krishna, the late legends of whom are connected with Kathiawar as the earlier ones are with *Muttra* (p. 224), was shot by the Bhil. In the Gir Forest, inland from Patan, is the only place in India where there are one or two separate communities of African negroes. Mahmud of Ghazni conquered the town in 1025 A.D., and it appears that he left behind a Muhammadan Governor. Subsequently the Hindus recovered their power, but it was again cast down by Allaghkhan, circa 1300 A.D., and the coast belt or Nagher kingdom conquered. From this date Muhammadan supremacy prevailed throughout the belt, and from the reign of Muhammad Tughlak governors were regularly appointed. Through the gallantry and statesmanship of Diwan

doubt, like the temple of Nemnath, on Girnar, surrounded by an enclosure which would make it a strong place. Now the temple stands alone, stripped even of its marble, like, but superior to, the temples of Dabhoi and Lakkundi. There are three entrances to the porch, and a corridor round the central octagonal space, which was covered by the great dome. There are four smaller domes. The dome in the centre is supported by eight pillars and eight arches. The pillar on the right hand, looking from the E., next but one



Plan of Temple of Somnath, by
Dr J. Burgess.

before reaching the adytum, has an inscription, which is illegible except the date, Samwat 1697=1640 A.D. The walls on the N., S., and W. sides have each two handsomely-carved niches, in which there have been idols.

The temple is said to have been first built of gold by Somraj, then of silver by Ravana, then of wood, by Krishna, and then of stone by Bhimdeva. Though three times destroyed by the Muhammadans, it was nevertheless three times

restored, and so late as 1700 A.D. was still a place of great sanctity. But in 1706 Aurangzeb ordered its destruction, and brought it to a final state of ruin.

The celebrated expedition of Sultan Mahmud of Ghazni to Somnath took place in 1024 A.D. He marched with such rapidity, by way of Gujarat, that the Hindu Rajas were unable to collect their forces for its defence, and after a sharp fight for two days, conquered both the city and the temple. Immense spoil was found in the temple, and after a short stay Mahmud returned to Ghazni. It was on this occasion that he carried off the famous "Gates of Somnath," of which the so-called representatives are now in the fort at Agra. Sir Henry Elliot records that 10,000 populated villages were held by the temple as an endowment, and that 300 musicians and 500 dancing-girls were attached to it. There were also 300 barbers to shave the heads of the pilgrims.

The confluence of the Three rivers or *Tribeni*, to the E. of the town, has been, no doubt, a sacred spot from times of remote antiquity. It was near this that, according to tradition, Krishna, sleeping under a deer-skin, was accidentally shot by a Bhil and killed. The road to it passes through the E. gate, called the *Nana*, or "small," also the *Sangam*, or "confluence gate." It has pilasters on either side, and on the capitals figures are represented issuing out of the mouths of Makaras, fabulous crocodiles which in Hindu mythology are the emblems of the God of Love. About $\frac{1}{4}$ m. outside the gate is a pool on the right hand, called the *Kund*, and a small building on the left, called the *Adi Tirth*, and next to these is a temple and the *Tirth* of *Tribeni*, where people are always bathing. The stream here is from 100 yds. to 200 yds. broad, and

runs into the sea. N. of this, about 200 yds. off, is the *Suraj Mandir*, or Temple to the Sun, half broken down by Mahmud, standing on high ground, and wondrously old and curious. Over the door of the adytum are groups of figures, with a tree between each two. Inside the adytum is a round red mark for the sun, not ancient; and below is a figure of a goddess, also coloured red. On the W. and S. outer walls are masses of carving much worn. At the bottom there is a frieze of *Keshari* lions—that is, lions with elephants' trunks. This temple is probably of the same age as that of Somnath. About 250 yds. to the W. is a vast tomb, quite plain; and below, in a sort of quarry, is a subterraneous temple, which is called Ahdi Shah's. The same name is given to a mosque with six cupolas to the N., which has been a Hindu temple.

200 yds. to the N.W., inside the Nana Gate, will be found the temple built by Ahalya Bai to replace the ancient Somnath. Below it is another, reached by descending 22 steps. The dome of this subterraneous building is supported by 16 pillars. The temple itself is 13 ft. square. It is of no interest except on account of its builder, Ahalya Bai (pp. 123-4).

Returning towards Veraval, about $\frac{1}{2}$ m. outside the Junagadh Gate is the Mai Puri, which in ancient times was a temple of the sun. The carving of this building is exquisite, and in better preservation than that of the Somnath temple. In the centre of the building is an enclosure 6 ft. sq., in which Mai Puri, "the Perfect Mother," is buried. A legend states that she brought about the siege of Somnath by Mahmud. The temple (or mosque, as the Moslems have made it) contains a mass of old Hindu carving, still beautiful, though mutilated. Not far from the Mai Puri is the tomb of Silah Shah. To the S.E., about

50 yds., is the tomb of Mangroli Shah, which has been restored. Before reaching the shrine the visitor passes through the porch of an ancient Hindu temple.

Near this spot is the *Bhid Bhanjan Pagoda* on the shore, locally known as Bhidiyo—very old, perhaps of the 14th century. It is 60 ft. high, and forms a good mark for sailors.

Various coasting steamers call at Veraval regularly, and a traveller can go by sea to Bombay or to Porbandar, Cutch, or Karachi.

(2) *Jetalsar to Porbandar.*

9 m. *Dhoraji*, an important commercial town. There is a tramway communication between the railway station and the town.

78 m. from Jetalsar is *Porbandar* terminal station (D.B.) (population 24,821), E. of the town, the capital of the State, a place of some interest. The State is at present under administration, owing to the minority of the Chief. There is a quarry at Adatiana, the stone from which is famous. There is also a Portland cement factory at Porbandar. In spite of the levy of heavy customs dues and the competition of other ports, commerce is considerable, including besides a local traffic with the Konkan and Malabar coast, a brisk trade with the Persian Gulf, Arabia, and the E. coast of Africa. Silk of good quality and cotton cloth are manufactured. It is identified with the ancient city of Sudāmpuri, known to the readers of the *Bhagavata*. Near this is an old temple of Sudāma. The line is continued for goods traffic along the shore to the creek, W. of the town, where it terminates in a wharf. The place is a very old-world corner, very interesting to those who have leisure, or to sportsmen. Coasting steamers between Bombay and Karachi touch at Porbandar.

The places of interest in the neighbourhood are :—

(a) *Srinagar*, 9 m. N.W. of Porbandar, believed to have been the first capital of the Jetwa Rajputs. There are remains of an ancient temple of the sun.

(b) *Miani*, a very ancient seaport 18 m. N.W. of Porbandar. To the extreme N.W., in the district of Okhamandal, directly under the Gaekwar of Baroda, are some of the most sacred *Hindu Temples* in India—viz., those at Dwarka ("door") and Bet ("island"). The original possessors of the place were a war-like tribe of Rajputs, called "*Waghir*," who were notorious pirates up to the early part of the 19th century, and, though reduced at that time by the British Government, still cling to their former traditions, by which each man believes that he is a rightful Prince.

(c) *Chaya*, a village 2 m. S.E. of Porbandar, was once the capital. The old Palace is still there.

(d) *Bileswar*, 8 m. N. of Rana-wao station, a small village E. of the Barda Hills. There is here a fine temple of considerable antiquity, well preserved.

(e) *Ghumli*, or *Bhumli*, is about 12 m. N. of Bileswar, or 24 m. from Porbandar by the road passing W. of the Barda Hills. This place is now absolutely ruined; it was the capital of the Jetwas when at the zenith of their power. It lies in a gorge of the Barda Hills; the ruins are of the 11th or 12th century. The chief remains are the Lakhota, Ganesh Dehra, Rampol, Jeta Wao, the temples near the Son Kansari Tank, and some ruins on the summit of Abapura Hill. It is about 4 m. S. of Bhanwar, a fort belonging to the Jam of Nawanagar.¹

40 m. S.E. from Porbandar, at Madhavapur, Krishna is said to have been married. There is a temple dedicated to him.

(3) *Jetalsar to Rajkot, Wankaner, and Wadhwan.*

23 m. Gondal, the capital of the Gondal State and the residence of the Chief, is a cheerful, well-kept town, with many handsome temples. The public offices are situated outside the town on open sites surrounded by gardens. The courtyard of the Palace is very handsome. Gondal has always been pre-eminent amongst the States of its class for the vigour and success of its public works. It has a College for the sons of Girassias who cannot afford the Rajkumar College at Rajkot, which is magnificently equipped and run on modern Public School lines. It surpasses all other Kathiawar schools in its methods. It contains the Bai Sahib Asylum, the Bhagwatsinhji Orphanage, a Girls' High School, and water-works for irrigation and water supply. Various other large buildings are all well designed and equipped.

46 m. Rajkot station, a civil and military station, the residence of the Agent to the Governor, Kathiawar, and the headquarters of the administration (population 34,000).

The most important public work in Rajkot is the *Kaisar-i-Hind Bridge* over the Aji River, built by Mr R. B. Booth, whose name is connected with nearly every important modern building in the Province. The total cost of the bridge was Rs.117,500, of which the Chief of Bhaunagar paid all but Rs.7500. He was educated at the Rajkumar College, on which he bestowed Rs.100,000 to build a wing and a residence for the Principal, further contributed Rs.50,000

¹ Ghumli is illustrated in Dr Burgess's *Second Archaeol. Rep.*

to the Endowment Fund, and has also made other donations.

At the *Rajkumar College* the young Princes of Kathiawar, Gujarat, and other Agencies, are educated. It was opened in 1870. On the ground floor is a fine hall, surrounded by class-rooms. Along both fronts is a massive veranda, and over the E. entrance a rectangular tower 55 ft. high. The entrance is on the W., and is flanked by two circular towers. The N. and S. wings contain forty suites of bedrooms and sitting-rooms, bathrooms and lavatories. To the W. of the N. wing is a chemical laboratory, and on the opposite side are a gymnasium and racquet-court. N. of the laboratory are extensive stables. The young Princes, besides playing all manly games, are drilled as a troop of cavalry. W. of the quadrangle are the houses of the Principal and Vice-Principal, with extensive gardens. S. of the buildings is the cricket-field of 19 acres. The college was founded by Colonel Keatinge; it also has the Ranjitsinghji Swimming-bath and the *Hide Sanatorium*.

The *High School* was opened in January 1875. It was built at the expense of the Nawab of Junagadh, and cost Rs.70,000. In the centre is a fine hall.

In Rajkot Civil Station are the Jubilee Gardens, containing the Memorial Institute. It comprises (1) the Lang Library; (2) the Connaught Hall, which is used for public meetings and official Darbars; and (3) the Watson Museum—a famous collection of antiquities, products, and manufactures of Kathiawar. The Connaught Hall contains an excellent statue of Her Majesty Queen Victoria, portraits of His Royal Highness Prince Victor, and of all the leading Chiefs of Kathiawar. The building is well furnished in all its branches.

N.E. of Rajkot there are (1) the

Victoria Jubilee Waterworks, for the Civil Station; and (2) the Lalpuri Irrigation Works, for the Rajkot city, with irrigation canals for the adjoining fields.

A branch line runs W. to (54 m.) *Nawanagar* or *Jamnagar* (population 44,887), capital of the State of that name, of which the famous cricketer, H.H. Jam Sri Sir Ranjitsinghji, K.C.S.I., is Chief. Marble is found in the Kandorna and Bhanvad Mahals, copper in the Khambhalia Mahal. There is also a pearl fishery lying off the coast of the S. shore of the Cutch Gulf. The Jamnagar dyers are well known, and the town is famous for silken and gold embroidery. The Kotha and Lakhota are very picturesque, and the new palace constructed by the present Chief. Hence *Mandvi* can be reached by native craft, but is best reached by steamer direct from Bombay about twice a week. Small steamers occasionally ply between Bedi, near Nawanagar, and Bombay.

From Rajkot the *Morvi State Railway* (a metre-gauge line) runs N.E. to Wadhwan, *via* *Wankaner* junction station (26 m.). This is the capital of a small State. The country around is undulating, rising into hills W. and S. From Wankaner the line runs E. to (48 m.) Wadhwan and (88 m.) Viramgam (see p. 200). From this point a line runs (41 m.) to Mehsana (see p. 180) for Ajmer, Delhi, etc.

ROUTE 12.

- (a) BANDIKUI JUNCTION to BHARATPUR Junction, Achnera Station, and Agra, and
- (b) Achnera Station to Muttra, Brindaban and Hathras Road, and by road to Mahaban, Gobardhan, and Dig.
- (c) Agra to Delhi, direct route (by Midland Railway), through Muttra.

(a)

61 m. Bharatpur Junction (D.B.). Here the C.I. Railway is joined by the B.B. Railway broad gauge route from Ratlam and Kotah to Muttra and Delhi (p. 169). Bharatpur is the capital of a Jat State (33,918 inhabitants); the Maharaja, however, usually resides at Sawari, 3 m. from Bharatpur. The ruling family is descended from a Jat Zamindar named Churaman, who harassed the rear of Aurangzeb's army during his expedition to the Deccan. He was succeeded by his brother, and after him by his nephew, Suraj Mal, who fixed his capital at Bharatpur (1733), and subsequently (1761) drove out the Mahratta Governor from Agra, and made it his own residence.

In 1765 the Jats were repulsed before Delhi and driven out of Agra.

In 1782 Scindia seized Bharatpur and its territory; but restored fourteen districts, and when he got into difficulties he made an alliance with the Jat Chief Ranjit Singh.¹ The Jats, however, were defeated by Ghulam Kadir at Fatehpur-Sikri, and were driven back on Bharatpur, but being reinforced at the end of the same year, 1788,

¹ Ruled 1763-1805. The Jats had successfully defended their mud forts on previous occasions.

they raised the blockade of Agra, and Scindia recovered it. In 1803 the British Government made treaty with Ranjit Singh, who joined General Lake at Agra with 5000 horse, and received territory in return. Upon Ranjit Singh intriguing with Jaswant Rao Holkar, Bharatpur was besieged by General Lake, but four assaults on the fort were repulsed with a loss of 3000 men. The Chief then made overtures for peace, which were ratified on the 4th of May 1805. On troubles breaking out regarding the succession, Bharatpur was again besieged by General Lord Combermere, and on the 18th of January 1826, after a siege of three weeks, the place was stormed. The loss of the besieged was estimated at 6000 men killed and wounded. The British had 103 killed and 477 wounded and missing. On this occasion again the British artillery was unable to make any real impression on the mud defences of the fort, and the breach was made by the explosion of mines.

The Walled City of Bharatpur is an irregular oblong, lying N.E. and S.W. The inner Fort, surrounded by a ditch and a lofty mud wall, is contained in the N.E. half of the outer fort. Three Palaces run right across the centre of the inner fort from E. to W., that to the E. being the Raja's Palace. Next is an old Palace built by Badan Singh. To the W. is a Palace which is generally styled the Kamra; it is furnished in semi-European style.

There are only two gates to the inner fort—the Chauburj Gate on the S., and the Assaldati on the N. The fine bastion at the N.W. corner of the inner fort is called the *Jowahar Burj*, and is worth ascending for the view. N. of the Kamra Palace is the Court of Justice, the Jewel Office, and the Jail. On the road between the Chauburj Gate of the inner fort

and the Anah Gate of the outer fort are the Gangaka Mandir, a market-place, a new mosque, and the Lakshmanji Temple.

78 m. from Bandikui Achnera junction station (R.), of the line of railway passing through Muttra to Bindraban and to Hathras on the East Indian Railway and to Farrukhabad, Fatehgarh, and Cawnpore. (See p. 405.)

93 m. AGRA, Idgah Station, is the junction of the B.B.C.I. Railway (broad gauge) and the Rajputana-Malwa Railway branch of the B.B.C.I. (metre-gauge). Travellers for the hotels alight at

94 m. AGRA Fort Station (R.), just outside the Delhi Gate of the Fort.

(b) Achnera Station to Hathras Road.

23 m. from Achnera is **MUTTRA** (or Mathura). The modern town of Muttra (population 58,183) lies on the right bank of the Jumna, and comprises a Municipality in which the City and Civil Lines are included, and a Cantonment. The city lies to the North of the municipal area. South of this comes the Cantonment, and to the S. of the Cantonment and interlaced with it the enclave of Civil Lines. All are linked up by the main Agra-Delhi Road.

In the Civil Lines are situated the Collectorate Court (*kachahri*), the Civil Law Courts, and other public offices, the Jail, the Museum (see below), the P.W. Inspection Bungalow, the Club, the so-called Cantonment Post Office and the residences of the Civil Officials.

The city proper is described below.

Outside the city proper the only buildings of note or places of interest are the new Headquarters Hospital, erected mainly at the cost of Goswami Sri Gobardhan Lalji,

the high priest of the Nathdwara temple in Udaipur, in memory of his pilgrimage to Muttra in 1912; the Victoria Memorial; the Dam-pier Park and Suburb, recently laid out; and the Museum. With the exception of the latter, all the aforementioned places lie in a compact block on the main Agra-Delhi Road between the city and Cantonments.

The city has recently been equipped with an up-to-date water works installation, the pumping station for which is situated at Laldiggi, not far from Potara Kund (see below) on the Muttra-Gobardhan Road.

There are no hotels in Muttra. The D.B. is situated in Cantonments.

Cantonments.—Only one cavalry regiment is ordinarily stationed at Muttra.

In Cantonments are situated the Dak Bungalow and the three Churches—Anglican, Roman Catholic and Nonconformist. The Dak Bungalow is small and of an indifferent character. Proposals for its reconstruction are under consideration. The Anglican Church contains a few interesting tablets; the Roman Catholic Church, which was constructed by Mr Growse, is an attempt to combine features of both Western and Oriental architecture.

The cemetery, which is just behind the Dak Bungalow, contains some interesting monuments to the memory of Major-General Frazer of the 11th Regiment of Foot and other officers, who fell at the Battle of Dig in 1804.

Not far from the cemetery is also the tomb of Lt. P. H. C. Burlton of the 67th N.I., who was shot by his detachment, which mutinied on the 30th May 1857.

Muttra is served by three railway lines. The G.I.P. main line from Bombay to Delhi (868 m.); the B.B. and C.I. broad-gauge from

Bombay to Delhi, *via* Nagda (775 m.), and the B.B. and C.I. metre-gauge from Achnera to Cawnpore, which connects with the R.K.R. and B.N.W.R. metre-gauge systems at Kasganj and Cawnpore and the E.I.R. system at Hathras Junction.

All three lines converge at the Junction Station, which is the principal station for travellers proceeding to or arriving from the Bombay, Agra, or Delhi directions. This station is situated about 2 m. from Cantonments and the city, and is equipped with ample waiting-room accommodation and refreshment rooms.

The Cantonment Station (B.B. C.I. metre-gauge only) is conveniently situated on the Delhi-Agra road, about half-way between the city and Civil Lines, and is used mainly by passengers proceeding to or arriving from the Naini Tal, Bareilly, Lucknow, or Cawnpore directions. There is no refreshment room at this station, and the waiting-room accommodation is very limited.

The station, formerly called the City Station, now known as Masani, is situated on the branch metre-gauge line from Muttra to Brindaban, and is only used by pilgrims travelling between these two places.

The Cantonments and Civil Lines are well laid out with the usual broad roads and avenues of trees. In the city the roads are extremely narrow.

Motorists proceeding from Agra to Delhi or Brindaban who do not wish to pass through the city, should take the Delhi Branch road, which leaves the Agra-Delhi main road just South of the quarterguard in Cantonments, and, skirting the city, rejoins it outside the Shah-ganj Gate near the Masani Station.

From Muttra there radiate metalled roads to Delhi (98 m.); to Brindaban (6 m.); to Bharatpur (25 m.); to Dig (24 m.); to Agra (35 m.); to Hathras (25 m.)

The road to Hathras crosses the

Jumna on the B.B.C.I. metre-gauge railway bridge. About 2 m. E. of the railway bridge another metalled road branches off leading to Gokal, Mahaban, Baldeo, and thence to Sadabad and the Etah district.

Although the present town of Muttra is comparatively modern, the site is of great antiquity, and has been inhabited from at least 600 B.C. The earliest town appears to have been further back from the river towards the modern village of Maholi, but in the course of centuries the city has gradually moved nearer the Jumna. It is possible also that some alterations may have taken place in the position of the latter, due to fluvial action. It is referred to by Ptolemy as *Máδourpa ἢ τῶν Θεῶν* and was a great Buddhist stronghold in the Buddhist period.

Fa Hian, in the beginning of the 5th century A.D., found that there were 20 Buddhist monasteries with 3000 monks at Muttra: but when Hsien Tsang visited the place in 634 A.D., the number had declined to 2000. The Buddhists had disappeared when Mahmud of Ghazni came to Muttra in 1017 A.D. Here remained there twenty days, pillaged and burned the city, and carried off five golden idols, whose eyes were of rubies, worth 50,000 dinars = £25,000. A sixth idol of gold weighed 1120 lbs., and was decorated with a sapphire weighing 300 Mishkals, or 3½ lbs. There were also 100 idols of silver, each of which loaded a camel. The idols together were worth not less than £3,000,000. The Brahman temple of Kesava Deo was built on the very site where the great Buddhist monastery, Yasa Vihara, stood. Muttra was attacked by Sikandar Lodi in 1500, and great harm was done to the shrines and temples.

The Fort, rebuilt in Akbar's time, is in the centre, but only the substructure now remains. During his tolerant reign and that of his son Jahangir Muttra again

began to flourish, but the present city dates from the time of Abdun Nabi—one of Aurangzeb's Governors (1660-1668). He was killed in a local revolt, which Aurangzeb utilised as a pretext for demolishing all the chief temples in the town, including the Kesava Deo temple. With the break-up of the Mughal Empire, troublous times ensued for the Muttra district. Lying, as it does, on the high roads between Delhi and Agra and Bharatpur it became the cockpit of all the fighting that took place between the Mughals, the Jats and Mahrattas during the eighteenth century in their struggles for the dominion of Northern India.

The district and city of Muttra came into the possession of the British as the result of Lord Lake's famous campaign, 1803-1805, and, with the exception of certain military operations undertaken in 1825 in regard to a disputed succession to the Bharatpur Raj, enjoyed a period of undisturbed peace up to the outbreak of the mutiny. On receipt of information of this outbreak, the ladies and non-combatants were sent off immediately to Agra, and it was proposed to send all the treasure from the Muttra treasury to that station also. The detachment of the 44th and 67th infantry regiment that had been sent for from Agra to escort the treasure from Muttra to Agra, mutinied, shot their Officer-Commanding, Lt. Burlton, and marched off towards Delhi, after setting fire to all the bungalows and offices, and releasing the prisoners in the jail. Prior to this outbreak Mr Mark Thornhill, the Magistrate of the district, had proceeded in the direction of Delhi, with Captain Nixon, who was in charge of the Bharatpur army. They had got as far as Hodal on the way to Delhi, when Mr Thornhill returned with a detachment to take measures to put down local disturbances in the Muttra district. While he was at Chhata

the news of the pillage of the Muttra Treasury was brought to him by the European officers who had escaped when Lt. Burlton was shot. The party rejoined Captain Nixon at Hodal and prepared to intercept the mutinous treasury-guard which was now approaching. The whole Bharatpur forces, however mutinied; and the Europeans with them were forced to seek safety in flight. Captain Nixon and others decided to proceed to the army before Delhi, while Mr Thornhill and his head clerk returned in the direction of Muttra, but eventually pushed on to Agra, owing to the disturbed condition of the country. After a short time Mr Thornhill returned to Muttra with a small body of volunteers and attempted to restore order, but the task proved too great for the forces at his disposal, and he and other Europeans with him had eventually to return to Agra.

Peace was gradually restored after the relief of Agra by Greathed in October 1857. Throughout the rebellion the great banking firm, known as the Seths of Muttra, displayed most conspicuous loyalty, and they and the Raja of Hathras received substantial rewards in the shape of confiscated villages for their assistance.

Such is, in brief, the history of Muttra. The abiding interest of the place still lies in its antiquity and buildings, and its religious associations. Not only the town itself, but the greater part of the district, known as Braj Mandal, commands the reverence and respect of Hindus. It is studded with places of pilgrimage, connected with the Krishna legend, and is visited throughout the year by devout crowds of pilgrims. More especially is this the case in the rainy season, when large bands of pilgrims, under the guidance of their religious leaders, perambulate the district, performing the "Ban-jatra," or "forest-pilgrimage," and acting the main scenes in the life

of Krishna at the various localities still connected by legend with such scenes.

The chief places of pilgrimage are Muttra city itself, Brindaban, Mahaban with Gokul, Baldeo, Gobardhan and Radha Kund, and Barsana, which will now be briefly described.

Muttra City. The city is entered by the Hardinge Gate, also called the Holi Gate, built by the Municipality. The finely-carved stone-work façades of the better class of houses are well worthy of inspection, and form one of the peculiarities of the city.

The River and Ghats.—The Jumna is about 300 yds. broad. There is a paved street the whole way along it, with bathing ghats, descending to the water, and ornamental chabutras, or platforms, and small but well-proportioned pavilions.

Visitors should make a point of seeing the *Arati* ceremony, or worship of the sacred river, which takes place about dusk at the Visrant Ghat, when cows, monkeys, and turtles are fed. The most convenient way of seeing the ceremony is to take a boat.

The river is full of turtles, some of them very large, poking their long necks and heads out to be fed. About 80 yds. N. of the bridge is the fine House of the Guru Parshotamdas. Then comes another belonging to a Gujarati merchant, Ballamdas. N. again is a stone tower, 55 ft. high, called the *Sati Burj*, because, when Kans was killed by Krishna, his widow became *sati* here. Mr Growse, to whose instance Muttra owes much of its best modern architectural work, says it was the wife of Raja Bhar Mal, of Amber, mother of Bhagwandas (p. 197), who built it in 1570 A.D. The traveller now descends several steps to the Visrant Ghat, a little

N. of the Sati Burj, and so to a sort of square, where Rajas are weighed against gold. There is a small white marble arch here, close to the river. Beyond this is a ghat built by Jai Singh, of Jaipur, and the enormous house and temple belonging to the well-known late Seth Lakshman Das, son of Seth Gobind Das.

Close by, in the centre of the town, on an isolated site, rises the Jami Masjid, built by Abd-un-nabi, once covered with encaustic tiles; its court is 14 ft. above the level of the street. On either side of the façade of the gateway are Persian lines. The chronogram gives the date 1660-1661. Over the façade of the mosque proper are the 99 names of God. At the sides are two pavilions roofed in the Hindu manner. There are four minarets, which are 132 ft. high. About $\frac{1}{2}$ m. beyond is the Katra, which is an enclosure like that of a sarai, 804 ft. long by 653 ft. broad. Upon a terrace 30 ft. high stands a great red stone mosque, built by Aurangzeb, and used as an *Idgah*, and the most conspicuous object in a distant view of Muttra. This mosque was raised on the ruins of the Kesab Dev Temple, which was destroyed by Aurangzeb, and which, shortly before its destruction, was seen by the travellers Bernier, Tavernier, and Manucci, who describe it as a grand edifice. The foundations of the temple are still plainly traceable at the back of the mosque. Excavation has proved that the Brahmanical temple of Kesava Dev was in its turn built, as stated above, on the ruins of a large Buddhist monastery, which, as appears from inscriptions found here, dated back to the Kushan period, and still existed in the days of the Gupta Emperors. The earliest Buddhist inscriptions found here may be assigned to the beginning of the Christian era, and one of the latest contains

the well-known genealogy of the Gupta dynasty, down to Samudra-Gupta (4th century A.D.). A Buddha image, extracted by General Cunningham from a well in 1862, and now preserved in the Lucknow Museum, mentions the *Yasi-vihara*, evidently a sanctuary which once existed on this site. The inscription is dated in the Gupta year 230 (A.D. 549-50).

At the back of the Katra is a modern temple to Kesava, and close by is the *Potara-Kund*, a tank in which Krishna's baby linen was washed. This tank is faced throughout with stone, and has flights of stone steps down to the water. There is also a very steep ramp for horses and cattle.

The Museum of Archaeology, situated on the Agra-Delhi Road between the Collector's court-house (*kachahri*) and the Tahsil (*i.e.*, the Tahsildar's Office), contains a very remarkable collection of ancient sculptures, inscriptions, and other antiquities found in the Muttra district. The building, which was erected by public subscription at the instance of Mr Mark Thornhill, was originally intended to be a R.H. for Indians of rank, but, being found unsuitable for the purpose, it was converted into a museum by Mr F. S. Growse. "I proposed," Mr Growse wrote, "to make it not a general, but simply an architectural and antiquarian museum, arranging in it, in chronological series, specimens of all the different styles that have prevailed in the neighbourhood, from the reign of the Indo-Scythian Kanishka, in the century immediately before Christ, down to the Victorian period, which could be illustrated in perfection by the building itself." Mr Growse placed in it the sculptures excavated by himself from various mounds in the neighbourhood of the city of Muttra. Of late years the original collection has been very considerably extended

through the efforts of the Honorary Curator, Rai Bahadur, Pandit Radha Krishna, and contains now several pieces of unique interest. Among the sculptures of Mr Growse are to be seen particularly the Bacchanalian group of Pali Khara, remarkable for its pronounced classical inspiration, and the exquisitely-carved standing Buddha image of the 5th century A.D., which was unearthed on the site of the Buddhist monastery founded by King Huvishka, now occupied by the Collector's court-house. Among recent acquisitions the following deserve special mention — the colossal statue from the village of Parkham, which belongs to the 2nd century B.C., and is one of the oldest detached images found in Indian soil; and the image of a Nāga, or serpent god, of the reign of Huvishka, which Pandit Radha Krishna obtained from the village of Chhargaoon. The quaint pillar erected outside the museum building is a sacrificial post (*Yupa*) erected by a Brahman in the reign of Vasishka, who must have been the successor of the great Kanishka. Of Kanishka himself the museum possesses a life-size statue, which in a most realistic fashion shows the King's costume and weapons. The head and arms are unfortunately lost. Together with this statue two images were found, one of colossal size, which also must represent Princes of the Kushan dynasty.

For further particulars the visitor may be referred to the illustrated catalogue of the Archaeological Museum at Mathura by Dr Vogel, of the Archaeological Department (Allahabad, Government Press, United Provinces, 1910). Price, Rs.3, 8 as. Copies can be had from the Press and at the Museum building.

Mahaban is about 6 m. S.E. of Muttra, on the left bank of the Jumna, and is reached by a good

road. It is a very ancient town and place of pilgrimage, and first emerges into modern history in the year 1017 A.D., when it shared the fate of Muttra, and was sacked by Mahmud of Ghazni. The Hindu Prince is said, when the fall of the town became inevitable, to have solemnly slain his wife and children and then committed suicide. In 1234 a contemporary writer mentions Mahaban as one of the gathering places of the army sent by Shams-ud-din Altamsh against Kalinjar. It is incidentally referred to by the Emperor Babar in 1526.

The country round about it, although now bare of woods, appears to have been once literally *Mahaban*, "a great forest." Even as late as 1634, the Emperor Shah Jahan held a hunt here, and killed four tigers. This ancient woodland country fringing the sacred Jumna is the scene of very early religious legends. In Sanskrit literature it is closely associated with Gokul, about a mile off, overhanging the Jumna. Indeed, the scenes of the youthful adventures of Krishna, actually shown at Mahaban, about a mile from the river, are ascribed in the Puranas to Gokul. Gokul seems to have been originally the common name for the whole, although it is now restricted to what must have been the waterside suburb of the ancient town.

The ruins of Mahaban, which rise as a hill of brick and mud, covering about 30 acres, are on the site of the old fort. The architectural remains combine Buddhist and Hindu forms. Mahaban is celebrated as the place where in his infancy Krishna was brought by his nurse and exchanged with the newly-born daughter of Jasoda, wife of Nanda, to save him from death, which had been decreed by Krishna's uncle, the giant Kans. The most interesting relic at Mahaban is the so-called Palace of

Nanda, the foster-father of the changeling Krishna. It consists of a covered court, re-erected by the Muhammadans in the time of Aurangzeb from ancient Hindu and Buddhist materials to serve as a mosque, and is divided into 4 aisles by 5 rows of 16 pillars, 80 in all, from which it takes its popular name of Assi Khamba, or the "Eighty Pillars." Many of the capitals are curiously carved with grotesque heads and squat figures. Four of them are supposed to represent by their sculptures the four ages of the world. The pillar known as the Satya Yug, or "Golden Age," is covered with rich and beautiful carving; that known as the Treta Yug, or "Second Age" of the world, is adorned with almost equal profusion. The Dwapar Yug, or "Third Age," is more scantily carved; while the Kali Yug, or present "Iron Age" of the world, is represented by a crude unsculptured pillar.

In the Palace of Nanda are laid the scenes of Krishna's infancy. His cradle, a coarse structure covered with red calico and tinsel, still stands in the pillared hall, while a blue-black image of the sacred child looks out from under a canopy against the wall. The churn in which Krishna's foster-mother made butter for the household is shown, and consists of a long bamboo sticking out of a carved stone. A spot in the wall is pointed out as the place where the sportive milkmaids hid Krishna's flute. One pillar is said to have been polished by his foster-mother's hand, as she leant against it when churning, and others have been equally polished by the hands of generations of pilgrims. From the top of the roof there is a view over mounds of ruins, with the Jumna beyond showing its waters, at intervals, amid an expanse of sand, high grasses, and rugged ravines. Mahaban is still a very popular place of pilgrimage

among the Hindus. Thousands of Vishnu worshippers, with yellow-stained clothes, yearly visit the scenes of the infancy of the child-god. The anniversary of Krishna's birth is celebrated during several days in the month of Bhadon (August) by a vast concourse of people.

The river-side village of Gokul, about a mile from Mahaban, where Vishnu first appeared as Krishna, has few relics of antiquity. Its shrines and temples are quite modern. It is approached, however, by a lofty and beautiful flight of steps (ghat) from the river, and for more than three centuries it has been the headquarters of the Valabhacharya sect, or Gokulastha Gusains, whose founder preached here. Many thousands of pilgrims, chiefly from Gujarat and Bombay, yearly resort to this centre of their faith, and have built numerous temples of a rather tasteless type.

Some 5 m. from Mahaban, on the same metalled road, lies another famous place of pilgrimage, **Baldeo**; known more familiarly as "Dauji." The town derives its celebrity from the famous temple of Baladeva, Krishna's elder brother, which consists of the temple proper and a number of court-yards attached. Hard by the temple is a brick-built temple over 80 yds. sq., called the "Khir-sagar," or "sea of milk." It is in a dilapidated condition, and the surface of the water is always covered with a thick green scum, which does not, however, deter the pilgrims either from drinking or bathing in it. Here, it is said, that Gusain Gokul Nath was warned in a vision that a god lay concealed. Immediately a search was made, and the statue of Baladeva, which has, however, been regarded as a tutelary divinity of the place, was revealed to the adoring gaze of the assembled multitudes.

16 m. to the W. of Muttra is the famous pilgrimage centre of **Gobardhan**. This town lies astride a low narrow range of hills called the "Giriraj Pahar," which is the celebrated hill which Krishna is fabled to have held aloft on the top of his finger seven days and seven nights to cover the people of Braj from the floods poured down upon them by Indra. The town clusters round the margin of a very large irregularly-shaped masonry tank, called the "Manasi Ganga," which, as the name denotes, is supposed to have been called into existence by the operation of the Divine will. Close to the Manasi Ganga is the famous temple of Harideva, erected during the reign of Akbar by Raja Bhagwan Das of Amber. It is an edifice 135 ft. long by 35 ft. in width, and both in plan and design is singularly like those early Romance Churches that are constantly met with in the S. of France, belonging to the 11th and 12th centuries. On the opposite side of the Manasi Ganga are two stately cenotaphs, or *chhatris*, to the memory of Radhir Singh and Baladeva Singh, Rajas of Bharatpur. In that which commemorates Baladeva Singh, who died in 1825, the exploits of the British army under Lord Lake figure conspicuously in the paintings on the ceilings of the pavilions.

From Gobardhan a metalled road runs North to **Radha Kund**, distant about 3 m.—another famous place of pilgrimage. On the way between the two places is another and much more magnificent cenotaph, erected in honour of Raja Suraj Mal, the founder of the present ruling family of Bharatpur. Behind the cenotaph is an extensive garden, and in front, and at the foot of the terrace on which the cenotaph of the Raja and his queens stand, is an artificial lake called Kusum Sarovar.

cient for that climate, are picturesquely arranged and pleasingly divided. It is, however, the combination of vertical with horizontal lines, covering the whole surface, that forms the great merit of the design."¹

E. is a modern *Temple*, built by Seth Radha Krishna and Seth Gobind Das in the Dravidian style. Europeans are not allowed to enter, but above the W. gate is a terrace, commanding a view of the temple, which consists of a vast enclosing wall, with three gopurams, which are 80 ft. to 90 ft. high, while the gates are about 55 ft. It is dedicated to Sri Ranga, a name of Vishnu (pp. 532, 587); and figures of Garuda, the man-bird of Vishnu, are very conspicuous. In the great court are two white marble pavilions, one E. and W. of the tank, and a stone pavilion with a flat roof, supported by sixteen pillars, opposite the E. gopuram.

At the back of the red temple on the W. are, at two corners, two other temples which resemble each other. There is a new temple adjoining this to the W., built by a Bengali Babu. It is not tasteful, but has a finely-carved door.

The Madan Mohan Temple stands above a ghat on a branch of the river. Under two fine trees, a *Ficus indica* and a *Nauclea orientalis*, is a pavilion, in which many cobras' heads are represented. Siva is said to have struck Devi with a stick here, when she jumped off this ghat, and made it a place for curing snake-bites. On the ghat is a Saligram (a species of Ammonite worshipped as a type of Vishnu), with two footprints $2\frac{1}{2}$ in. long. This temple is 65 ft. high, and is in the shape of a cone.

The Temple of Gopi Nath is thought by Mr Growse to be the

earliest of the series. It was built by Raesil Ji, who distinguished himself under Akbar. It resembles that of Madan Mohan, but is in a ruinous condition. Its special feature is an arcade of three bracket arches.

The Temple of Jugal Kishor is at the lower end of the town, near the Kesi Ghat. It is said to have been built by Neo-Karan, a Chauhan Chief, in 1627 A.D. The choir has pierced tracery in the head of the arch, and above it a representation of Krishna supporting the Hill of Gobardhan.

The Temple of Radha Ballabh, of which the shrine was demolished by Aurangzeb, is also a picturesque ruin.

47 m. from Achnera is Hathras City (population 37,854).

52 m. Hathras Road station, junction of E.I. Railway (p. 405).

(c)

Agra Cantonment station to Delhi, direct route by G.I.P. Railway through Muttra. This direct route, occupying $3\frac{1}{2}$ -6 hours, runs through—

33 m. Muttra (p. 219).

59 m. Kosi.

85 m. Palwal, and

110 m. Tughlakabad to

122 m. Delhi (957 m. from Bombay by this Indian midland route, and 864 m. by the B.B. and C.I. direct broad-gauge route).

From Tughlakabad onwards the line passes through the ruins of old places S. of Delhi (pp. 270, 275), the Kutb Minar, 7 m. to the W., being at first in full sight.

¹ Fergusson, *Ind. and East. Arch.*, 2, 156.

ROUTE 13.

AGRA AND FATEHPUR-SIKRI.

AGRA * There are a number of railway stations at Agra, but visitors are concerned only with the fort station (p. 405), at which they will arrive if coming by the E.I. Railway from the E., and the Cantonment station (p. 158), lying W. of the Cantonment (p. 228), on the G.I.P. Railway main line from Bombay to Delhi, where conveyances will always be found. Pestonji's garage and petrol store is near the Post Office. Petrol and motor requisites can also be obtained from the Popular Cycle and Motor Company in Taj Road, and from Nathmal Mahadeo, in Belanganj.

The city was renamed Akbarabad in the 16th century (Akbar 1556-1605), but the old name has prevailed over the new one. In size and importance it is the third in the United Provinces, and has a population of 185,449 (163,935 in the Municipality, 21,514 in the Cantonment). It stands on the right bank of the Jumna, in lat. $27^{\circ} 10'$ and long. $78^{\circ} 5'$. It is 790 m. distant from Calcutta by rail, 835 m. from Bombay by G.I.P. Railway, 122 m. from Delhi, and 779 m. from Peshawar. It is 534 ft. above sea-level. Roads from Agra lead to (1) Gwalior, 77 m., and Jhansi, 136 m.; (2) Bharatpur, 33 m.; (3) Muttra, 36 m., and Delhi 125 m.; (4) Aligarh, 50 m.; (5) Mainpuri, 68 m.

Though a week might be spent very pleasantly in visiting the sights in and around Agra, they can be seen in shorter time, and for those persons who have

not so many days at their disposal the following itinerary may be of service:—

1st Day, *Morning*.—Fort and Palace. *Afternoon*.—Drive to the Jami Masjid and on to the Taj.

2nd Day, *Morning*.—Drive to Sikandra. *Afternoon*.—To Itimad-ud-daula, and Chini ka rauza, on the left bank of the Jumna.

Most people will like to visit some of these places more than once. A full day, or, better still, 24 hours should be devoted to the excursion to Fatehpur-Sikri (23 m.).

The hotels are situated at the S. of the native city in and about the angle where the Cantonment boundary narrows on the W. Near them are the Post Office, banks, and club, the last at the W. end of the Mall, which leads E. to the Taj Road and the MacDonnell Park, laid out between the Taj and the fort, and enclosing at its N. end the memorial statue of Queen Victoria. S. of the telegraph office are fine public gardens. N. of the hotels, and on the W. of the city, situated on the Drummond Road, are the District Courts, the Agra and St John's Colleges, and beyond the latter the Central Jail. To the E. of this, and on the N. of the city, are the R.C. Cathedral, College, and Convent, and 1 m. to the N. are the Court of the District Judge and the R.C. Cemetery. The road to Sikandra, which is the main road to Muttra, runs N.W. from Agra, passing near the District Jail, and the road to Fatehpur-Sikri runs S.W. No one should miss the last, as the buildings of the Emperor Akbar's Palace are unique, and afford one of the most interesting sights in all India. The Jumna flows past the city in a direction from N. to S., but opposite the fort it turns on a great elbow, and in consequence the Taj is nearly due E. of the S.

end of the fort. It is desirable to visit the Agra Fort before Delhi, as otherwise it is difficult to understand the exact relation of the more isolated buildings of the latter palace.

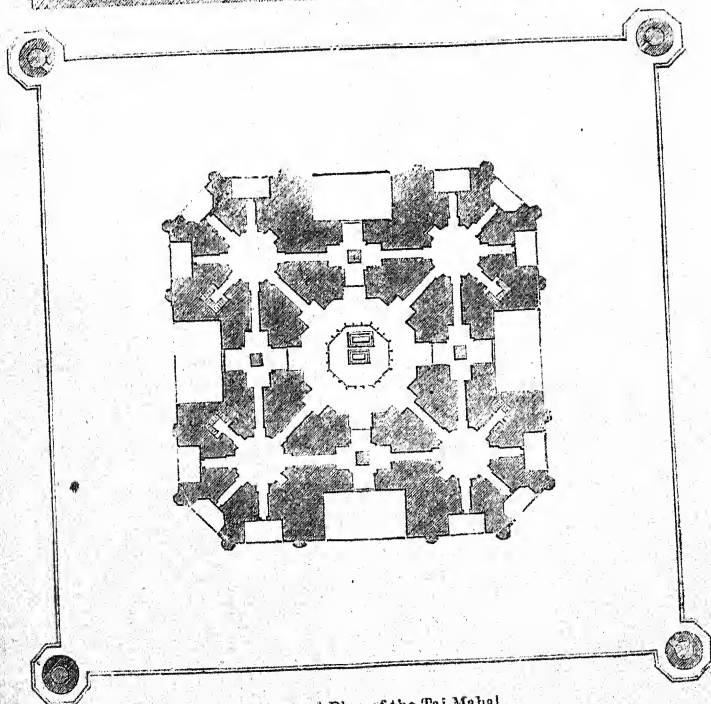
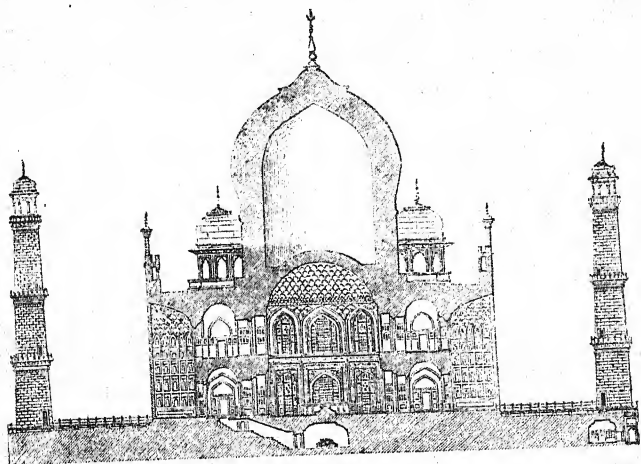
The old Native City covered about 11 sq. m., half of which area is still inhabited. It is clean, and has a fine bazar. The chief Articles of Native Manufacture are gold and silver embroidery, carving in soapstone, and imitation of the old inlay work (*pietra dura*) on white marble. Agra is also famous for its carpets. There is a flourishing boot and shoe industry, and numerous cotton-mills employ a large number of hands.

History.—Nothing certain is known of Agra before the Muhammadan period. The house of Lodi was the first Muhammadan dynasty which chose Agra for a settled residence. Before their time Agra was a district of Biana. Sikandar Lodi died at Agra in 1515 A.D., but was buried at Delhi; he built the Barahdari Palace, near Sikandra, which suburb received its name from him. Babar is said to have had a garden-palace on the E. bank of the Jumna, nearly opposite the Taj, and there is a mosque near the spot, with an inscription which shows that it was built by Babar's son, Humayun, in 1530 A.D.

The Emperor Akbar resided at Agra in the early years of his reign, and removed there from Fatehpur-Sikri about 1568. The only buildings that can now be attributed to him with certainty are the walls and the red sandstone buildings in the S.E. corner of the fort. He died at Agra in 1605. Jahangir left Agra in 1618, and never returned. Shah Jahan resided at Agra from 1632 to 1637, and built much of the fort and constructed the principal buildings of the palace and the Taj. Between 1638 and 1650 he caused the palace at

Delhi and the Jami Masjid to be erected, and he doubtless intended to remove the Capital to that place. Before this was finally done he was deposed by his son Aurangzeb in 1658, but lived as a State prisoner seven years longer at Agra. Aurangzeb removed the seat of Government permanently to Delhi. In 1764 Agra was taken by Suraj Mal of Bharatpur, and Samru, with an army of Jats, who did much damage to the town. In 1770 the Mahrattas captured it, and were expelled by Najaf Khan in 1774. In 1784, when Muhammad Beg was Governor, Agra was besieged and taken by Mahdaji Scindia and the Mahrattas held it till it was captured by Lord Lake, 17th October 1803, Colonel Hessian, who commanded, surrendering after a brief bombardment. Between 1835 and 1858 the seat of government of the N.W. Provinces was at Agra.

When the Mutiny broke out at Meerut on 10th and Delhi on 11th May 1857, there were in Agra one British Regiment and some British Artillery, and two N.I. Regiments, the 44th and 77th. The fort was at once secured by the Europeans, and after the two companies of the 44th, which had been sent to Muttra to bring the treasure there into Agra, mutinied and marched off to Delhi, their comrades in Agra were ordered to pile their arms on 31st May, and did so. On 4th July the Kotah Contingent mutinied, and went off to join the Nimach mutineers, consisting of a strong brigade of all arms, 2 m. from Agra. On 5th July Brigadier Polwhele moved out with 816 men to attack them. The battle began with artillery, but the enemy were so well posted, sheltered by low trees and walls and natural earthworks, that the British guns were able to do them but little damage. At 4 P.M. the British ammunition was expended; Colonel Riddell advanced with the English soldiers, and



Section and Plan of the Taj Mahal.

captured the village of Shahganj, but with such heavy loss that they were unable to hold their ground, and were obliged to retreat into the Fort of Agra.¹ The rebels burnt the Cantonments, murdered all Europeans who were found outside the fort, and then marched to Delhi.

There were now 6000 men, women, and children, including 1500 natives, in the fort, which was put in a thorough state of defence, Colonel Cotton assuming command. On the 20th of August he sent out Major Montgomery with a small column, which on the 24th defeated the rebels at Aligarh, and took that place. On the 9th September Mr Colvin, Lieut.-Governor of the N.W. Provinces, died. When Delhi was captured by the British in September the fugitive rebels, together with those of Central India, advanced, on 6th October, upon Agra. At this very time Colonel Greathed's force from Delhi arrived without their knowledge, and when the rebels attacked the place, they were completely routed on 10th October, and Agra was finally relieved from all danger.

The Taj Mahal should be seen repeatedly. The best time for a first visit is late in the afternoon. The building is properly named *Taj bibi ka rauza*, or "The Crown Lady's Tomb." It was commenced in 1040 A.H., or 1630 A.D., by the Emperor Shah Jahan, as a tomb for his favourite queen, Arjmand Banu, entitled Mumtaz-i-Mahal, the "Chosen of the Palace," or more freely, "Pride of the Palace." She was the daughter of Asaf Khan, brother of Nurjahan, the famous empress-wife of Jahangir. Their father was Mirza Ghiyas Beg, a Persian, who

came from Teheran to seek his fortune in India, and rose to power under the title of Itimad-ud-daula (see p. 241). Mumtaz-i-Mahal married Shah Jahan in 1615 A.D., had by him seven children, and died in child-bed of the eighth in 1629, at Burhanpur, in the Deccan. Her body was brought to Agra, and laid in the garden where the Taj stands until the mausoleum was built. The Taj cost, according to some accounts, Rs.18,465,186, and according to others, Rs.31,748,026, and took upwards of twenty-two years to build, according to Tavernier, who records that he saw both its commencement and completion, and that the scaffolding used was constructed of brick. There were originally two silver doors at the entrance but these were taken away and melted by Suraj Mal and his Jats. Austin of Bordeaux, who was then in the Emperor's service, probably took part in the decoration, and especially in the inlaid work, of the mausoleum.

Before reaching the Taj the State Circuit House, with its fine grounds, which merge into the MacDonnell Park, will be seen on the left. The surroundings outside the enclosure have been well restored of recent years, and both the tomb and the Fatehpuri mosque of red sandstone in front of the approach from the fort now form extremely picturesque features in the scene. The approach to the Taj is by the *Taj Ganj Gate*, which opens into an outer court 880 ft. long and 440 ft. wide. Inside the court are two tombs, and in the N.W. corner a small caravanserai—all of which have been satisfactorily repaired. On the right is a gate which leads into the quarter S. of the Taj, and on the left is the *Great Gateway* of the garden-court, built 1648, which Mr Fergusson (*Indian Architecture*, 2, 313) calls "a worthy pendant to the Taj itself."

¹ An appalling picture of confusion, insubordination, and insatiation in the fort is given in Mr M. Thornhill's *Personal Adventures and Experiences of a Magistrate in the Indian Mutiny*.

It is indeed a superb gateway of red sandstone, inlaid with ornaments and inscriptions from the Koran in white marble, and surmounted by twenty-six white marble cupolas.

Inside is the beautiful Taj garden. This is laid out in formal style, the whole to the S. of the platform of the Taj and the buildings which support it architecturally being divided by two main thoroughfares into four portions, which are again sub-divided into four. The principal vista, lined with fine cypresses, which has a marble water-course all down it, interrupted in the middle by a marble platform, leads directly to the Taj, which rises in all its peerless beauty at the end, and is mirrored in the water below. The trees of the garden, once too numerous and luxuriant, have been wisely thinned, and now admit of endless beautiful views and peeps of the marble dome, the marble walls, and the marble minarets, which can be enjoyed at leisure from the seats placed about the gardens. Very fine views are also obtained from the top of the great gate and from the halls in the centre of the side walls. Along the S. wall on either side of the great gate is an extremely fine pillared gallery of red sandstone. The beauty of the Taj is perhaps most perfect immediately after sunset, or under the moonlight; but every change of light seems to lend new graces to it. Those who linger for evening or night effects must take precautions against a possible chill in such damp surroundings.

The central marble platform on which the tomb stands is 22 ft. high and 313 ft. sq. At each corner is a minaret of white marble picked out by black lines, 137 ft. high. The tomb itself measures 186 ft. on each side, the corners being bevelled off and recessed into a bay. On either side of each angle corner is another small bay,

and in the centre of each side is a splendid deep bay 63 ft. high. The height of the walls and parapet over them is 108 ft.; at each corner above them rise smaller marble domes, and in the centre soars the great central dome, which rises to a height of 187 ft., the metal pinnacle adding yet 30 ft. to the whole; the height of the top of the dome above the level of the garden is just 25 ft. less than that of the Kutb Minar, and of the top of the pinnacle a few ft. higher than that. "This building," writes Mr Fergusson (*Indian Architecture*, 2, 316), "is an exquisite example of that system of inlaying with precious stones which became the great characteristic of the style of the Mughals after the death of Akbar." All the spandrels of the Taj, all the angles and more important details, are heightened by being inlaid with precious stones. These are combined in wreaths, scrolls, and frets, as exquisite in design as beautiful in colour. They form the most beautiful and precious style of ornament ever adopted in architecture. Though, of course, not to be compared with the beauty of Greek ornament, it certainly stands first among the purely decorative forms of architectural design. The judgment with which this style of ornament is apportioned to the various parts is almost as remarkable as the ornament itself, and conveys a high idea of the taste and skill of the Indian architects of the age.

The delicately-sculptured ornamentation, in low relief, to be found on all exterior walls and the recesses of the building, is in its way as beautiful as the *pietra dura* work itself.

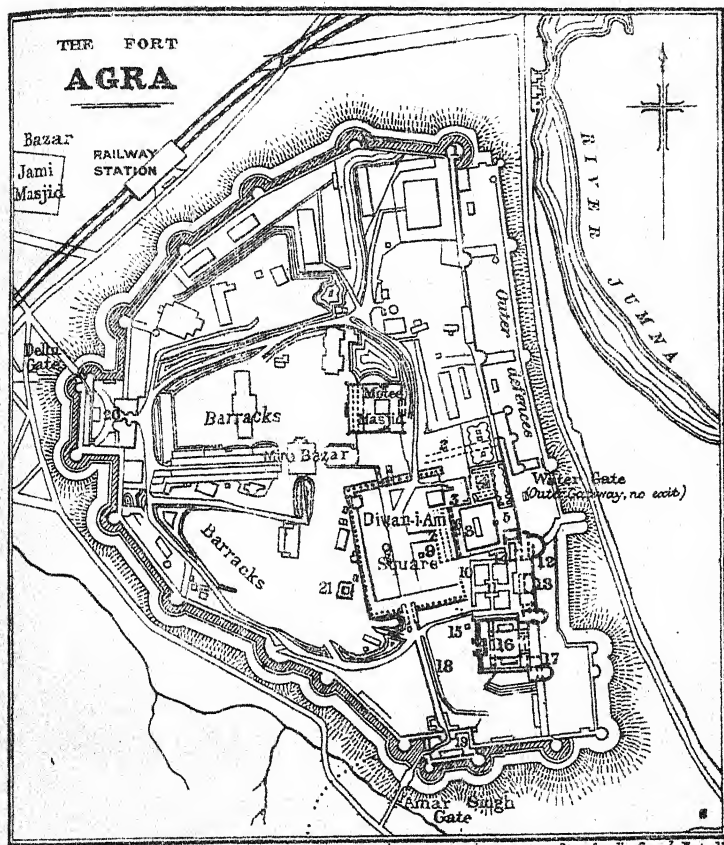
In the centre of the tomb is an octagonal chamber surrounded by a series of other rooms. Each side of the central room measures 24 ft. The dome rises 80 ft. above the pavement, and is 58 ft. in dia-

meter. Under the centre of the dome, enclosed by a trellis-work screen of white marble, which Mr Fergusson (*Indian Architecture*, 2, 316) considers "a *chef-d'œuvre* of elegance in Indian art," but which most people will rate less highly—it probably dates from the reign of Aurangzeb—are the tombs of Mumtaz-i-Mahal and Shah Jahan; the simple inlay work on these and the more elaborate work on the screen deserve special examination. "These, however, as is usual in Indian sepulchres, are not the true tombs—the bodies rest in a vault, level with the surface of the ground, beneath plainer tombstones, placed exactly below those in the hall above" (*Indian Architecture*, 2, 316). Over the two tombs hangs a fine Cairene lamp, the graceful gift of Lord Curzon. The inscriptions on them are "Markad-i-Munawwar i Arjmand Banu Begam, Mukhatib ba Mumtaz-i-Mahal, taufiyat san 1040" (the resplendent grave of Arjmand Banu Begam, called Mumtaz-i-Mahal, deceased in 1040), and "Markad i Mutahhari Ali i Hazrat i Fardausashyani Sahib Kiran i Sani, Shah Jahan Badshah, Taba Sarrahu" (the famous grave of his Imperial Highness, the resident of Paradise, the second Alexander (Lord of the two horns), King Shah Jahan. May his grave be fragrant). The Queen's tomb bears the 99 names of God. "The light to the central apartment," says Mr Fergusson (*Indian Architecture*, 2, 316), "is admitted only through double screens of white marble trellis-work of the most exquisite design, one on the outer and one on the inner face of the walls. In our climate this would produce nearly complete darkness; but in India, and in a building wholly composed of white marble, this was required to temper the glare that otherwise would have been intolerable. As it is, no words can express the chastened

beauty of that central chamber, seen in the soft gloom of the subdued light that reaches it through the distant and half-closed openings that surround it.¹ When used as a Barahdari, or pleasure-palace, it must always have been the coolest and loveliest of garden retreats, and now that it is sacred to the dead it is the most graceful and the most impressive of sepulchres in the world." There is a most wonderful echo in the dome. It was seriously proposed by a Governor-General of India to demolish the Taj and sell the marbles; but that was many years ago, and the mausoleum and its surroundings now receive far more loving care than would ever have been the case under a Muhammadan Emperor. For the excellent work done in this connection at Agra and at Fatehpur-Sikri and Sikandra of late years the public have to thank, in the first place, Sir John Strachey, and next, Sir Antony, now Lord, MacDonnell, and his able assistant, the late Mr E. W. Smith.

On a lower level at either side of the mausoleum are two fine buildings of red sandstone, that on the W. side being a mosque, and that on the E. side, forming a *jawab* (answer) or complement, a hall. On the pavement in front of the former, which bears the unusual decoration of flowers, is a representation of the finial of the Taj. The Taj was intended to be seen balanced between these two buildings, and every one should cross the river by the ferry-boat, which will be found at the end of the road which runs outside the W. wall from the entrance to the outer court, in order to realise this beautiful view. From the farther side various paths lead to the E. end of the Jumna Bridge, if it is desired to return by that route.

¹ The light in the interior is hardly sufficient now that the marble grilles are fitted with glass. It is not probable that the Taj was ever used as a pleasure-house.



Stanford's Geog. Estab.

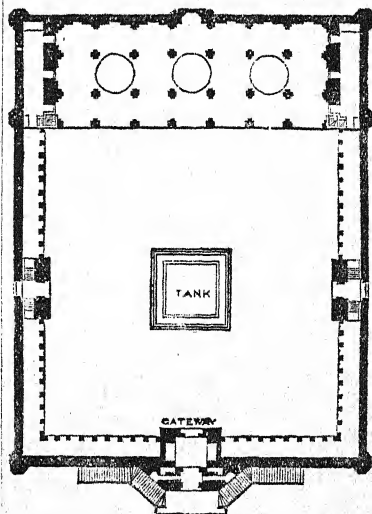
1. Northern Tower.
2. Descent to Water Gate.
3. Nagina Masjid and ladies' private Bazar.
4. Small Courts and ruins of Baths.
5. Open Terrace with Diwan-i-Khas on S. side.
6. Recess where the Emperor's Throne stood.
7. Diwan-i-'Am (Hall of Public Audience).
8. Machchi Bhawan.
9. Mr Colvin's Grave.
10. Mina Mosque.
11. The Anguri Bagh (Grape Garden).
12. Saman Burj (Octagon Tower). At N. angle is an outlet by secret passage.
13. Khas Mahal.
14. Shish Mahal (Mirror Palace).
15. Well.
16. Palace of Jahangir (or Akbar).
17. Tower. At the base is an entrance to a secret passage.
18. Incline from Amar Singh's Gate.
19. Court of Amar Singh's Gate.
20. Elephant Gate.
21. Kiosk of Salimgarh.

The Fort.—Most of the magnificent Mughal buildings which render Agra so interesting in the eye of the traveller are situated within the fort, which has a circuit of over a mile. The walls and flanking defences are of red sandstone, and have an imposing appearance, being nearly 70 ft. high; the finest portion of them is along the N. side and to the S. of the N.E. bastion. The ditch is 30 ft. wide and 35 ft. deep. The Water Gate on the E. is closed, but there are still two entrances—the Amar Singh Gate on the S., the Delhi Gate on the W. Outside the latter, and connecting it with the Jami Masjid, was the fine Tripulia court, removed after 1857; in it was the Nakkar Khana music gallery. Crossing the drawbridge to the Delhi Gate, and passing the outer and inner archways, the latter with a date of 1600 A.D., a somewhat steep slope between red sandstone walls will be found to lead to another gateway called the *Hathi Pol*, or “Elephant Gate.” There used to be two stone elephants here with figures of Patta and Jaimal (p. 129), the two famous Rajputs of Chitorgarh, said to have been removed to Delhi (p. 263), and the marks where their feet were fixed may still be traced on the platforms on either side of the archway. This is flanked by two octagonal towers of red sandstone, relieved with designs in white marble. The domed interior of the gateway, with a raised platform for the guard on either side, is very striking.

Inside the gate one broad road sweeps to the left, and, passing the magazine, turns to the front of the Moti Masjid and the N. gate of the court in front of the Diwan-i-'Am, while another, passing to the right as far as the head of the descent to the Amar Singh Gate, then turns to the S. gate of that court. A short way down the latter on the left a road, not always open,

leads to the Mina bazar, between the mosque and court.

The Moti Masjid, the “Pearl Mosque,” is described (*Indian Architecture*, 2, 317) by Mr Ferguson as “one of the purest and most elegant buildings of its class to be found anywhere.” He gives 1646-53 as the date of its erection; it is said to have cost Rs. 300,000. It was built by Shah Jahan on ground sloping from W. to E., and the fine entrance gateway of red sandstone makes



Moti Masjid.

a trihedral projection from the centre of the E. face; it is approached by a double staircase with a restored railing. The exterior is faced with slabs of red sandstone, the interior built of marble—white, blue, and grey veined. “The moment you enter by the Eastern gateway the effect of its courtyard is surpassingly beautiful” (*Indian Architecture*, 2, 317).

In the centre there is a marble

tank, 37 ft. 7 in. sq., for ablutions, and between it and the S.E. inner corner of the mosque there is an ancient sundial, consisting of an octagonal marble pillar, 4 ft. high, with no gnomon, but simply two crossed lines and an arc. A marble cloister runs round the E., N., and S. sides of the court, which measures 234 ft. and 183 ft., interrupted by archways, of which those in the N. and S. sides are closed. The mosque proper, or liwan, measures 149 ft. by 56 ft., and consists of three aisles of seven bays opening on to the courtyard, and surmounted by three domes. On the entablature over the front row of supporting pillars—i.e., on the E. face—there is an inscription running the whole length, the letters being of black marble inlaid into the white. The inscription says that the mosque may be likened to a precious pearl, for no other mosque is lined throughout with marble like this. Narrow flights of steps lead to the top of the gateway and to the roof of the mosque, from which there is a fine view. During the Mutiny this mosque was used as a hospital.

Beyond the Mina bazar on the right and the descent to the closed Water Gate on the left is the entrance to the fine court of the Diwan-i-'Am, with colonnades lately restored. In front of the Darbar Hall is the tomb of Mr Colvin, the Lieut.-Governor. The Diwan-i-'Am, or Hall of Public Audience, is 208 ft. long by 76 ft. deep, and consists of three aisles of nine bays open on three sides. The roof is supported by graceful columns of red sandstone, which have been subjected to judicious restoration. Along its back wall are grilles, through which fair faces could watch what was going forward in the hall below, and in its centre is a raised alcove of white marble, richly decorated with *pietra dura* work and low reliefs, which bear evident traces of Italian design. It is probably the

work of Shah Jahan, though lacking the elegance of most of the buildings of that Emperor.

The entrance to the inner courts of the Palace from this side is by a passage and steps to the N. of the Diwan-i-'Am; it was within these courts and the Diwan-i-'Am that the scenes which Captain Hawkins so graphically describes in connection with the Emperor Jahangir took place. The first enclosure entered is the Machchi Bhawan, or "Fish Square," which formerly possessed a large tank. A two-storeyed cloister runs all round it, except on the side which fronts the Jumna, where the upper storey gives place to an open terrace. In the N. side are two very fine bronze gates taken by Akbar from Chitorgarh (p. 130), and at the N.W. corner is a beautiful little three-domed mosque of white marble, called the Nagina Masjid, or "Gem Mosque." This was the private mosque of the royal ladies of the court, and was built by Shah Jahan, who was afterwards imprisoned there by his successor, Anrangzeb. Beneath, in a small courtyard, was a bazar where merchants used to display their goods to the ladies of the court. On the terrace on the river-side is a black throne with a white seat opposite it. The former has a long fissure, which is said to have appeared when the throne was usurped by the Jat Chief of Bharatpur. There is a reddish stain in one spot, which the natives pretend is blood. An inscription runs round the four sides, stating that "when Salim became heir to the crown his name was changed to Jahangir, and for the light of his justice he was called Nur-ud-din. His sword cut his enemies' heads into two halves like the Gemini." The date given is 1011 A.H. = 1603 A.D. Beneath this terrace is a wide enclosure within the outer walls, where contests between elephants and tigers used to take place. On the N. of the

terrace is the site of a hall of green marble and of various rooms of the Bath, or Hammam, now in a ruinous condition; and on the S. is the Diwan-i-Khas, or Hall of Private Audience. The hall, which consists of an open colonnade in front and an enclosed room at the back, measures 65 ft. by 34 ft. by 22 ft. high, and is a miracle of beauty. The carving is exquisite, and the flowers inlaid on the white marble with red cornelian and other valuable stones are introduced with better, because more sparing, effect than in the Diwan-i-Khas of Delhi. The date of the building is 1046 A.H.=1637 A.D. It is contained in the title Sa'adat Sarai wa Humayun Asas, the Abode of Joy and Auspicious Home. A staircase leads from the Diwan-i-Khas to the Saman Burj, a few steps on the right conducting to the tiny Mina Masjid, or private mosque of the Emperor, probably the smallest mosque in existence. The proper name of the Saman Burj is Musamman, or Octagon, but it is generally known by a corruption of its name as the Jessamine (Yâsmin) Burj; the chief Sultana lived in the beautiful pavilion, with a fountain and retiring-room over the river. The lovely marble lattice-work seems to have been broken by cannon-shot in some places. Part of the marble pavement in front of it is made to represent a Pachisi ("chess") board.

Opposite the Saman Burj, but usually entered from the next court, is the Shish Mahal, literally "Mirror Palace." It consists of two dark chambers furnished with fountains and an artificial cascade arranged to fall over lighted lamps. The walls and ceilings are decorated with pounded talc and with innumerable small mirrors, some of which were restored in 1875.

Above the buildings at this spot, and approached by steps above the Mina Masjid, are the remains

of reservoirs and water-ducts and arrangements for the raising of water from below. From the roof a fine view is also obtained of the courts, on either side of it, of the Moti Masjid and the Taj. Of the latter many fine views and peeps are obtained along the river from the terrace of the Machchi Bhawan to the Palace of Akbar.

The Anguri Bagh or "Grape Garden," now entered, is a fine square of 280 ft., now planted with grass. In the centre of the E. side is a lovely hall called the Khas Mahal, the gilding and colouring of which were in part restored in 1875. In front are small tanks and fountains. The Khas Mahal undoubtedly formed the model upon which the Diwan-i-Khas at Delhi was built; it measures 70 ft. by 40 ft. In the platform under it are subterranean apartments for use in the summer heats, from which passages lead to still cooler rooms round the baoli in the S.E. corner of the fort. On either hand, also facing the river, are the Golden Pavilions, so called from their curved roofs being covered with gilded plates of copper. In them are bedrooms for ladies, with holes in the wall 14 in. deep, into which they used to slip their jewels. These holes are so narrow that only a woman's arm could draw the contents out. In the S.E. corner of the Anguri Bagh will be found three rooms, beautifully decorated in fresco, which were the private apartments of Shah Jahan. The room nearest the river is an octagonal pavilion and very beautiful. In it, according to tradition, Shah Jahan died in 1666, gazing upon the Taj. To the W. of the rooms is another in which stand the so-called Gates of Somnath, 12 ft. high and finely carved; they are of deodar, not sandal, wood, and of Muhammadan work. There is a Kufic inscription running round

them, in which the name of Sabuktagin has been read. They were captured by General Nott at Ghazni, and brought here in 1842.

The Jahangiri Mahal, a beautiful red sandstone palace, now entered, was built either by Jahangir or Akbar. It stands in the S.E. part of the fort, between the palace of Shah Jahan and the Bangali bastion, the principal façade being on the E. This is handsomely decorated with bright tiles in the upper portion, and is pierced in the centre by a fine entrance gateway. This leads through a vestibule into a beautiful domed hall, 18 ft. sq., the ceiling of which is elaborately carved, and from which a corridor leads into the grand central court, which is 72 ft. sq. The design of this court, its pillars, the carving and ornamentation, are all pure Hindu, and for minute and exquisite ornamental carving in stone it is pre-eminent.

"On the N. side of the court is a grand open pillared hall, 62 ft. long and 37 ft. broad. The pillars support bracket capitals richly carved and ornamented with pendants. The front brackets support broad sloping eaves of thin stone slabs. But the stone roof or ceiling of this pillared hall is the most remarkable feature about it. It is supported most curiously by stone cross-beams, which are ornamented with the quaint device of a great serpent or dragon carved on them lengthways. A covered passage or corridor runs round the top of this hall, from which one can look down into it. The other pillared hall on the opposite or S. side of the grand court is somewhat less in size."

From the grand court a large chamber to the E. leads to a recessed portico in the centre of a quadrangle which faces the river, supported by two lofty pillars and two half pillars of the more slender and graceful Hindu kind. Some

of the chambers are lined with stucco, which has been painted, and has lasted better than the stonework. The palace ends on the side facing the river with a retaining wall and two corner bastions, each surmounted by an ornamental tower with a domed cupola. There are many vaulted chambers underneath the palace, used as places of retreat during the summer heats. A few years ago the palace was most successfully restored, a process rendered necessary by the bad quality of the red sandstone originally used.

The Akbari Mahal lies to the S. of the so-called Jahangiri Mahal. Till recently its Eastern rooms were used as a military prison, but they have now been opened up by the Archaeological Department, and from them an excellent view of the Taj and river is obtainable. The principal feature of these buildings was the large central courtyard, some 140 ft. square. The Western façade of the building stretched Southwards to a point near the S. outer wall of the fort, terminating in a *burj*, or tower, probably similar in design to the Southern *burj* of the Jahangiri Mahal. The whole of this façade has, unfortunately, disappeared, with the exception of a small portion near the Southern *burj* of the Jahangiri Mahal, which shows that it must have been similar in design to the façade of the Jahangiri Mahal. The foundations of what can undoubtedly be styled the Akbari Mahal were all disclosed by excavation, and the whole extent of the palace is now being represented by shrubberies. The unsightly walls to the N. and S. of the main courtyard have been covered with creepers. The two small courtyards in front of the Akbari Mahal were probably constructed towards the end of the 18th century.

In the space in front of the

Jahangiri Mahal is the *Hauz* of Jahangir, an enormous monolithic cistern of light-coloured porphyry, externally nearly 5 ft. high, and internally 4 ft. deep and 8 ft. in diameter at top; and at the N.W. corner is the head of the descent to the Amar Singh Gate, so called from the elder brother of Maharaja Jaswant Singh of Jodhpur, who was disinherited by his father for his turbulence, and was killed here in 1648 with all his followers after a fatal brawl within the royal precincts. Outside the Gate is the half-buried figure of a horse in red sandstone, and on rising ground to the S.W. are the cemeteries in which many who died in the fort during the summer of 1857 were buried. Near it is the N. end of the MacDonnell Park and the fine memorial of Queen Victoria, by Thorneycroft. The bronze statue, which is of standing figure on a high base, was unveiled by King George V., then Prince of Wales, on 18th December 1905. It was the S.W. bastion which was battered by Lord Lake in 1803 so successfully that the Mahratta garrison at once surrendered. Before descending to the Gate the beautiful little Hindu - Mughal Pavilion, situated on high ground outside the S.W. corner of the Diwan-i-'Am court, should be visited. It is perhaps the most ornamental structure of all in that style at Agra, and is probably the work of Salim Shah, son of the Emperor Sher Shah.

The Jami Masjid faces the Delhi Gate of the fort, close to the Port Railway Station, and a fine view of it is obtained from the footbridge to the station. It stands upon a raised platform 11 ft. high, reached by flights of steps on the S. and E. sides. The mosque proper measures 130 ft. by 100 ft., and is divided into five compartments, each of which opens on the courtyard by a fine

archway. The inscription over the main archway sets forth that the mosque was constructed by the Emperor Shah Jahan in 1644 in the name of his daughter, Jahanara, who afterwards shared her father's captivity (pp. 266 and 274). The great peculiarity of this Masjid consists in its three great full-bottomed domes without necks, built of red sandstone, with zigzag bands of white marble circling round them.

On the W. side of the city is the Agra College, which owes its origin to the Gwalior State, of which the Maharaja at the end of the 18th century made over certain villages in the districts of Muttra and Aligarh to a learned Brahman for the twofold purpose of keeping up a Sanskrit School and of supplying the wants of pilgrims visiting the shrines around Muttra. In 1818 the original grantee left his lands in trust to the E India Co., who devoted part of the proceeds to the establishment of this college and part to hospitals at Muttra and Aligarh. The College, opened in 1823, has over 600 students and 35 professors, lecturers, and demonstrators. It is affiliated to the Allahabad University and managed by a board of trustees. E. of the College, and situated in the Western outskirts of the city, are the Medical School and the Kalan Masjid. The mosque was probably built by Sikandar Lodi, and is the oldest building in Agra. N. of the Agra College the grounds on each side of the Drummond Road belong to St John's College, the most important of the Educational Institutions of the Church Missionary Society in India. The new buildings, which are a happy adaptation of the Mughal style of architecture to modern requirements, were designed by the late Sir Swinton Jacob, and contain a beautiful library and one of the finest halls in the country. Some 350 students—Christian, Hindu, and Muham-

madan assemble here daily at 10 A.M. in the cold weather for the opening prayers, and there is a lofty gallery in which visitors are freely accommodated. Adjoining the College are large schools for Christian boys and girls. Extending Eastwards from the Drummond Road towards the Fort are the Dufferin Hospitals, Medical School and Thomason Hospital. The Medical School, founded in 1854, is the largest in India, with 694 men and 62 girl students. The hospitals have over 500 beds, and last year treated 53,392 patients.

E. of the Central Jail are the **Roman Catholic Cathedral, Convent, and Schools**, dedicated to the Virgin Mary, the first with a tower about 150 ft. high. The buildings are large, but not architecturally interesting. The Mission was founded in the time of Akbar, and has long been celebrated for its school, where the children of soldiers and others are educated. The earliest tombs connected with the settlement of Christians at Agra are in the R.C. cemetery, which lies $\frac{3}{4}$ m. to the N. The most ancient epitaphs are in the Armenian character. Among the tombs are those of John Hessing and John Mildenhall (died 1614) and the notorious Samru, Walter Reinhardt (see p. 294). N.W. of the Cathedral is the Kandahari Bagh, where Shah Jahan's first Persian wife was buried, now Bharatpur House, and N. of it again the 'Seth's Garden, once containing the graves of Faizi and Abul Fazl (p. 248) and their sister, Ladli Begam.

The **Tomb of I'timad-ud-daula** lies about 250 yds. to the N. from the E. end of the new E.I.R. bridge. It is the mausoleum of Mirza Ghiyas Beg, a Persian, who was the father of Nur Jahan, and her brother, Asaf Khan, and a grandfather of the lady of the Taj, and who became high treasurer

of his son-in-law Jahangir. The tomb stands in a beautiful garden, which receives much attention, on a platform 4 ft. high and measuring 150 ft., and is itself 69 ft. sq. At each corner is an octagonal tower 40 ft. high, and on the terrace of the roof is a pavilion 25 ft. sq.; and the design of the mausoleum seems to have served for that of the Emperor Jahangir also, built by Nur Jahan at Shahdara, near Lahore (p. 321). The centre room below, measuring 22 ft., contains the two tombs of I'timad - ud - daula and his wife, made of yellow coloured marble; the side rooms round it display paintings of flower vases, fruits, etc., which were also reproduced in the Shahdara mausoleum. The marble lattice-work of the passages admitting light to the interior is extremely fine. The pavilion on the terrace of the tomb has a curved roof and broad sloping eaves, and contains two marble cenotaphs corresponding to those below. The whole of the exterior and much of the interior is of white marble with beautiful inlay work. The inlay work here is the earliest known in India (1628 A.D.), and will appear to many more pleasing than the less simple work in the buildings of the Emperor Shah Jahan.

Half-a-mile N. of this is the **Chini ka rauza**, or china tomb. It is the burial-place of Afzal Khan, who was in the service of Jahangir and Shah Jahan. He died at Lahore in 1639, and was buried at Agra in the tomb he had erected during his own lifetime. It has one great dome resting on an octagonal base. In the centre of the octagonal domed chamber, much ruined, are two tombs of brick, which have replaced marble tombs. Externally it is decorated with glazed work, such as was so successfully used on the public buildings at Lahore; the flower

patterns of many of the panels are very effective, and must once have been very beautiful.

Farther up the left bank of the river again is the Rambagh, where the Emperor Babar is said to have been buried pending the erection of his mausoleum at Kabul. The river terrace of this garden is extremely picturesque.

The mausoleum of the Emperor Akbar at Sikandra, so named from Sikandar Lodi, who reigned 1488-1518 A.D., is $5\frac{1}{2}$ m. from the Cantonment at Agra. There are many tombs on the way, and on the left side of the road, about 4 m. from Agra, and nearly opposite the lofty arched gateway of an ancient building called the Kachi ki sarai, there is a sculptured horse, said to have been erected in memory of a favourite horse of Akbar's, which died near this spot. At $\frac{1}{2}$ m. farther on, a little back from the road on the E. side, is a tank of red sandstone, with ornamental octagonal towers, called Guru ka tal. On the S. side are three flights of steps, and E. of them is a long and broad channel of masonry, which brought water to the tank. $\frac{1}{2}$ m. beyond the mausoleum of Akbar is a red sandstone two-storeyed building, the ground floor of which contains forty chambers. Each corner of the building is surmounted by a short octagonal tower. It is believed by some authorities to be the tomb of Mariam uz zamani, wife of the Emperor Akbar,* whom tradition has converted into a Christian (p. 245). Cleared of modern excrescences, it now stands practically in its original condition, except for much of the carved sandstone facing, which has, unfortunately, disappeared.

A fine gateway leads to the great garden enclosure in which the mausoleum of the Emperor Akbar is situated: on either side of it in flanking walls are boldly-pierced sandstone grilles. It is of red

sandstone, inlaid with white marble in various polygonal patterns, very massive, and with a splendid scroll of Tughra writing a foot broad adorning it. On the top of the gateway, at each corner, rises a white minaret of two storeys; the cupolas destroyed over 120 years ago have been restored. There is a fine view from the platform at the top. A broad paved path leads to the mausoleum. It is a pyramidal building 74 ft. high, of four storeys, three of which are of red sandstone, the fourth, enclosing the cenotaph, being of white marble. The basement measures 320 ft. each way, and the top storeys 157 ft. Mr Fergusson was of opinion (*Indian Architecture*, 2, 300) that the idea of the arrangement was taken from that of a structural Buddhist monastery, but this hardly seems probable. A massive cloister runs round the lower storey, broken S. and N. by high central arches, that on the S. forming the entrance to the tomb chamber. The vaulted ceiling of the vestibule was elaborately frescoed in gold and blue, and a section of this has been restored. The Surah-i-mulk¹ runs under the cornice in a scroll 1 ft. broad. A gentle incline leads to the dark vaulted chamber in which the great Akbar once rested: but Ját villagers pillaged the tomb, and burnt his bones. On either side of the main arch some bays of the cloister are screened off, and contain tombs with inscriptions in beautiful characters. In a niche in the side of the room, farthest from the entrance, is an alabaster tablet inscribed with the 99 divine names.

Narrow staircases lead to the platforms and terraces above. The fourth is surrounded by a beautiful cloister of white marble, carved on the outer side into lattice-work in squares of 2 ft., every square of a different pattern.

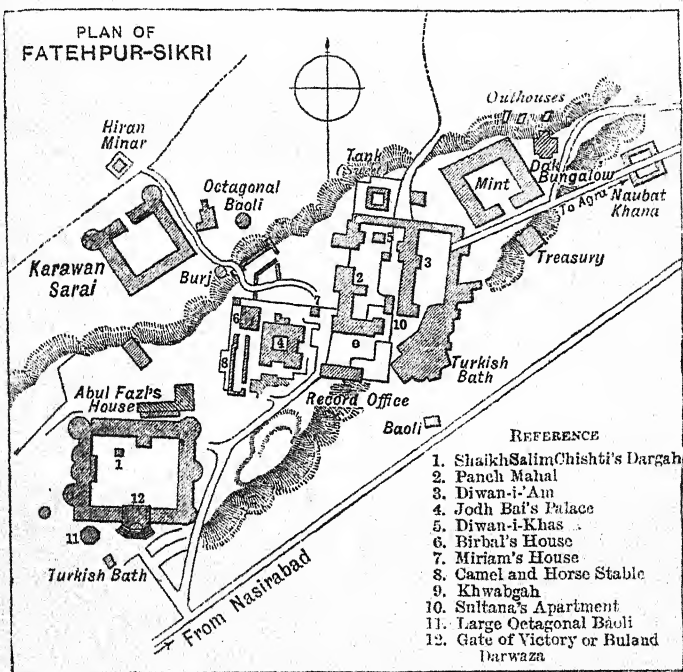
¹ A chapter of the Koran.

In the centre is the splendid white monolith cenotaph of the Emperor, engraved with the 99 glorious names of the Deity, just over the place where his dust rests in the vaulted chamber below. On the N. side of the cenotaph is inscribed the motto of the sect he founded, "Allahu Akbar," "God is greatest"; and on the S. side, "Jalla Jalalahu," "May His glory

The cost of the tomb was 15 lakhs.

A good shady road—the one used by the great Akbar himself—leads S.W. to

FATEHPUR-SIKRI (D.B.), 23 m. from Agra. (Motors for the trip can be hired in Agra.) The B.B. Railway broad-gauge system has been extended from Agra Fort



shine." To the N. of it, at the distance of 4 ft., is a handsome white marble pillar 2½ ft. high, which, according to tradition, was once covered with gold and contained the Kob-i-nur. The wind sighing through the pierced screens maintains a perpetual solemn requiem over the great Emperor. The gateway recesses in N., E., and W. walls of the garden are also decorated with marble mosaics.

station to Biana (pp. 170, 248) through Fatehpur-Sikri. At the entrance to Shahganj are the ruins of a mosque, with an inscription saying it was built in 1621. It marks the site of the old Ajmir Gate. Farther on is a Moslem cemetery, with a tomb said to be that of Mirza Hindal, son of Babar, father of Akbar's chief wife. At the foot of the tomb is a monolith 7 ft. high, with the date 1570.

The royal but long-deserted city of Fatehpur-Sikri, standing on a low sandstone ridge, was the creation of Akbar, who built every structure in it, but abandoned it for Agra. Owing to this fact, and on account of its very perfect preservation, it forms a unique specimen of a city in the exact condition in which it was occupied by the Great Mughal and his court. The alleged reason for its construction was the presence on the spot of the Chishti Saint, Shaikh Salim; and the undoubted reason of its desertion was the difficulty of obtaining good water in the place and the unhealthiness of its surroundings.

From the arrangement of the buildings it is evident that Akbar had the whole carefully planned out. This will be seen by the position of the Khwabgah, Akbar's private room, which commands the *Daftar Khana*, Record Office, and the whole of the principal buildings, and from which he could reach, without being observed, the "Jodh Bai" Palace, Miriam's House, Birbal's House, the Panch Mahal, Turkish Sultana's House, Council Chamber, etc., etc. Inside the old walls of the city and about $1\frac{1}{2}$ m. from Fatehpur and Sikri the road divides, that to the left passing under the ridge and to the village at the foot of the steps below the Buland Darwaza, and that going straight on gradually ascending the ridge to the palace. This passes beneath the Naubat Khana, from the upper rooms of which musicians played as Akbar entered the city. Farther left are the remains of the Treasury, and opposite it what is known traditionally as the Mint, a large quadrangular building. Near the mint a new Travellers' Rest House has been built. Beyond this the road enters the inner enceinte of the palace and the court in front of the Diwan-i-'Am, measuring some 366 ft. from N. to S. by

181 ft. from E. to W., and surrounded by a flat-roofed cloister. On the W. side is the Audience Hall, with a deep veranda in front, and an isolated space for the Emperor between two pierced stone screens of fine geometric design. The room behind has a peculiar roof, which was painted. The road leads through the courtyard to the *Daftar Khana*, or Record Office, once the D.B. On the back is a staircase leading to the roof, from which there is a fine view of the city. The inner stone partition walls are modern. In front, facing N., is Akbar's *Khwabgah*, or Sleeping Apartment, literally "House of Dreams." Written on the internal walls over the architraves of the doors are some Persian complimentary verses (much defaced). The remains of the paintings which once decorated it are now very slight. Below is a room, and at the E. end of it a platform, supported by two splendid red sandstone shafts, beautifully carved. Probably a Hindu priest lived here. The space to the N. formed the *Khas Mahal*.

At the S.E. corner of this courtyard is the "Turkish Queen's" House,¹ which many may consider the most interesting apartment of all. As it now stands it consists of only one small chamber, 15 ft. by 15 ft. Every square inch is carved, including the soffits of the cornices. The ceiling and decoration of the veranda pillars and pilasters are exceptionally fine. Inside is a most elaborate dado about 4 ft. high, consisting of eight sculptured panels representing forest views, animal life, etc. Above the wall takes the form of a stone lattice screen, the divisions of which were used as shelves. Much of the carving is curiously like Chinese work, and reminds one of what Abul Fazl says of the local red sandstone: "Clever workmen chisel it so skilfully as

¹ Rumi Sultana.

no turner could do with wood, and their works vie with the picture-books of Mani" (a legendary Persian painter).

W. is the Girls' School, a small, plain building, carried on square stone piers. Upon the paving-stones of the open space in front (E.) is the Pachisi ("chess") board, with the Emperor's stone seat in the centre, in the form of a cross laid out in coloured pavement, and it is said the game was played with slave girls as pieces to make the moves.

Just to the N. of this is the Panch Mahal, a building of five storeys, borne by open colonnades, each tier being smaller than the one below, till nothing but a small kiosk remains a-top. It was probably erected for the ladies of the court as a pleasure resort, as the sides were originally enclosed with stone screens. The first floor is remarkable on account of the variety of the 56 columns which support the storey above, no two being alike in design. Many of the shafts are similar, but the caps vary; at the angles of one are elephants' heads with interlaced trunks; on another is a man gathering fruit. On the N.W. angle is a group of four columns, which should be examined. From the topmost floor there is a splendid view.

At the N. of the quadrangle is the Diwan-i-Khas, or "Private Hall," or Council Chamber. From the outside it appears to be two storeys high, but on entering it is found to consist of one only, with a central pillar crowned by an immense circular corbelled capital, radiating from which to the four corners of the building are four stone causeways enclosed by open trellis stone balustrades (restored). Tradition says that in the centre of this capital the Emperor sat, whilst the corners were occupied

by his four Ministers. The shaft is beautifully carved, and deserves careful study. On the E. and W. sides are stone staircases communicating with the roof. The open screen-work in the windows is modern. A few feet to the W. is the building known as the Ankh Michauli. The story told is that the Emperor here played hide-and-seek with the ladies of the court; but it was most likely used for records. It consists of three large, lofty rooms, surrounded by narrow passages, lighted by stone screen windows. The ceilings of two of the rooms are coved, but the third is flat, and supported on struts ornamented with grotesque carving. In front of the S.E. corner is a small canopied structure used by the astrologer, who probably was a Hindu Guru, or "teacher." It is in the style of architecture used by the Hindus during the eleventh and twelfth centuries. Under the architraves are curiously-carved struts issuing from the mouths of monsters dowelled into the shafts at the corners. The under side of the dome was painted. Adjoining these buildings to the W. is the Hospital, with some of the stone partitions forming the wards still extant. The ceilings are of solid slabs of stone, carved on the exterior to represent tiles.

Outside the W. side of the Khas Mahal enclosure is the House of Miriam (traditionally a Portuguese Christian, but really the Jaipur Princess who bore the title Mariam uz zamani, and was mother of Prince Salim, afterwards the Emperor Jahangir), a small building with defaced frescoes in the niches and upon the walls and piers of the veranda. One, in which the wings of angels are distinctly visible, has been thought to suggest the Annunciation. At one time the whole house was painted inside and out. The original name Sonahri Makan, or "Golden

House," was given it on account of the profuse gilding with which its walls were adorned. On the N.W. is Miriam's Garden, and at the S.E. angle her bath, with a large column in the centre. On the W. side is the Nagina, or Ladies' Mosque, and the remains of a small Turkish bath. At the S. end of the garden is a small fish tank, which, together with the stone pavement of the garden, was brought to light by Mr E. W. Smith.

To the N.W. a road leads to the **Hathi Pol** (Elephant Gate) on the N. of the city. Over the W. archway, 20 ft. from the ground, are two life-sized elephants much mutilated—probably by Aurangzeb. To the left is the **Sangin Burj**, a groined bastion or keep, said to have been the commencement of the fortifications planned by Akbar, but abandoned on account of objections raised by Shaikh Salim Chishti. Down the old stone-paved road on the left is the **Karawan Sarai** (caravanserai). It consists of a large court 272 ft. by 246 ft., surrounded by the merchants' hostels. Formerly the S.E. side was three storeys high. At the N. end, beyond the Sarai, stands the **Hiran Minar** ("Deer Minaret"), a circular tower some 70 ft. high, studded with protruding elephants' tusks of stone. Tradition says that it is erected over the grave of Akbar's favourite elephant, and that from the lantern in the top the Emperor shot antelope and other game driven under it by beaters. The land to the N. and W. was a large lake in Akbar's time.

On the left of the road returning to the **Hathi Pol** is a very fine stone well surrounded by rooms and staircases, which formed a part of the waterworks. The water was lifted from this level by a series of Persian wheels and a system of reservoirs to the arched gate on the N.W. corner of Birbal's

House, and thence dispensed throughout the palace.

The Palace of Birbal stands to the S.W. of Miriam's Garden, near the N.W. corner of the Jodh Bai palace. It is the finest in Fatehpur-Sikri, and is said to have been built by Raja Birbal for his daughter, who, however, was not one of the wives of Akbar. It is a two-storeyed building of red sandstone standing on a raised platform, and consists of four rooms 15 ft. square, and two entrance porches on the ground floor and two above with small terraces in front of them, enclosed by stone screens, forming a ladies' promenade. Over the upper rooms are flat-ribbed cupolas, carried on octagonal drums, and supported on richly-ornamented corbel brackets stretching across the angles of the rooms; and the stone-panelled walls and niches are covered with intricate patterns. The ceilings of the lower rooms are supported on a fine and unique frieze, and the whole of the interior—pilasters, recesses, walls, and cusp-arched doorways—are elaborately and beautifully carved with geometrical patterns. The exterior walls are almost as profusely ornamented. No wood has been used in the construction of this extraordinary building, to which the words of Victor Hugo have been applied: "If it were not the most minute of palaces, it was the most gigantic of jewel-cases." Raja Birbal was celebrated for his wit and learning, and was the only Hindu of eminence who embraced the new religion of Akbar, whose favourite courtier he was. He perished with the whole of the army he was commanding in the Yusufzai country to the N.E. of Peshawar in 1586.

S. of Birbal's house are the Stables for 102 horses and nearly as many camels. In some of the mangers stone rings for the horses'

halters still remain, and on the N.W. side one of the old doors. The camel stables are lighted by openings in the roof.

The Palace of Jodh Bai is probably erroneously so called, as it is more likely that it was used by the Emperor or by his chief wife, Sultana Rakiya, his first cousin. The entrance is on the E. from the open space in front of the *Record Office*. It is a quadrangular building 232 ft. by 215 ft. The courtyard within has reception rooms on the N., S., and W. sides, connected by a flat-roofed corridor partly closed by stone walls. The room on the W. is more ornate than the others, and in the rear wall is a fireplace. There are chambers above, and those on the N. and S. sides rise to two storeys; they are gable-roofed and ornamented with blue enamelled tiling, recalling the Man Mandir Palace of Gwalior (p. 153). At the angles the chambers are surmounted by cupolas, originally painted. Overlooking Miriam's garden is a small projecting room, the walls of which are entirely composed of beautiful stone lattice work. From the mezzanine floor on the N. side a closed passage leads to a garden abutting on the waterworks, beside which a gallery passed to the N. side of the Sarai near the Hiran Minar. It is now in ruins, and not easy of identification. In the passage, and just before the garden is reached, is a very fine stone screen beneath a small cupola.

The Dargah Mosque lies S.W. of the Jodh Bai Palace. The E. gate, called the Badshahi, or "royal" gate, opens into the quadrangle, which measures 433 ft. by 366 ft. To the right is the Tomb, or Dargah, of Shaikh Salim Chishti, grandson of the Shakkar Ganj Pir, who is buried at Pak Pattan (see pp. 190 and 354). It is surrounded by beautiful white marble lattice-

work screens, and has doors of solid ebony, ornamented with brass. The canopy over the tomb of the saint is inlaid with mother-of-pearl, hung with the usual display of ostrich eggs. On the cenotaph is written the date of the saint's death and the date of the completion of the building, 1580, "May God hallow his tomb!—the beloved helper of the sect and its saint, Shaikh Salim, whose miraculous gifts and propinquity to the Divine Being are celebrated, and by whom the lamp of the family of Chishti is illuminated. Be not double-sighted, looking to the transitory self, as well as to the everlasting Deity. The year of his decease is known throughout the world."¹ The brackets which support the dripstone or eaves of the tomb are copies of those in the old mosque² of the stone-masons. Childless women, both Hindu and Muhammadan, resort to the tomb and pray the saint to intercede in their favour. On the N. of the quadrangle is also the tomb of Islam Khan, surmounted with a cupola; he was the grandson of the saint and Governor of Bengal.

The Mosque proper (liwan), to the W., is said to be a copy of the one at Mecca. It is about 70 ft. high, and very beautiful. It consists of three interior square chambers surrounded by rows of lofty pillars of Hindu type. At the N. and S. ends are zenana chambers. Going out by a door at the back of the mosque, in an enclosure on the right, is an infant's tomb, said to be that of the saint's son, whose life was sacrificed at the age of six months in order that Akbar's son (Jahangir) might live

¹ All the inscriptions here may be found in the *Miftah-ul-Tawarikh*, by John Ellis, printed at Agra.

² This is outside the quadrangle and W. of the mosque, where Shaikh Salim lived his hermit life in a cave now covered by a room. In a portico on the right of the old mosque the saint taught his disciples before the place had attracted the notice of royalty.

when born. In the S. wall of the quadrangle is the gate of Victory, Buland Darwaza ("high gate"), which towers to the height of 130 ft. Mr Fergusson (*Indian Architecture*, 2, 297) expresses the opinion that when looked at from below its appearance is noble beyond that of any portal attached to any mosque in India, perhaps in the whole world. The grandeur of this great height is increased by a fine flight of steps on the outside, giving a total height of 172 ft.¹ There is a grand view from the top.

In the archway is an inscription on the left hand going out, which says that the "King of Kings, Shadow of God, Jalal-ud-din Muhammad Akbar, the Emperor, on his return from conquering the kingdoms of the S. and Khandesh, formerly called Dhandesh, came to Fatehpur in the 46th year of his reign (corresponding to 1601 A.D.), and proceeded from thence to Agra." On the opposite side is inscribed: "Isa (Jesus), on whom be peace, said: 'The world is a bridge, pass over it, but build no house on it. The world endures but an hour, spend it in devotion.'" The doors of this great gateway are studded with horse-shoes, affixed by the owners of sick horses, who implore the prayers of the saint for their recovery. From the steps, or, better still, from the summit of the gate, may be seen the villages of Sikri and Fatehpur and the surrounding tract of barren country. To the W. of the steps is a large well, into which boys and men used to spring from the walls from heights varying from 30 ft. to 80 ft.; but the practice has now been prohibited. A Mela, or fair, commences on the 20th of *Ramzan*, the anniversary of the saint's death, and lasts for eight days. In front of the steps are some Turkish baths.

¹ The gate and shrine are specially noticed by the traveller Finch.

Outside the N. wall of the Dargah are the houses of the brothers Abul Fazl and Faizi, the learned favourites of Akbar and followers of his new religion, now used as a boys' school. A little to the N.E. of the Record Office to the right of the road to the Dwani-i-'Am, is the *Hakim's*, or doctor's house, and a very large and fine *Hammam*, the walls and ceilings of which are richly ornamented with stamped plaster-work. To the right on leaving, and adjoining the high road below, is a spacious and interesting *Baoli*, from which the baths and this part of the city were supplied. Leading to a well at one end is a broad staircase enclosed on each side by rooms. Around the well are chambers for Persian wheels for drawing the water.

25 m. S.W. of Fatehpur-Sikri is *Biana* (pp. 170, 243), once a famous city, near which Babar defeated the Sanga Rana (Singram Singh) of Chitorgarh on 16th March 1527, after sustaining a severe check from this Prince in the previous month; it was from Babar's victory that Sikri received the name of Fatehpur. The Rana, who was the bravest Hindu warrior of his day, is said by Colonel Tod to have borne eighty wounds on his body. He refused to return as a defeated Chief to Chitor; and his grandson, Maharana Udai Singh, deserted that place for Udaipur after its capture by Humayun (1530-56). It belongs to the Bharatpur State, and has a population of 7000. Biana was first invaded by the Muhammadans under Muhammad Ghori in 1196 A.D. It shortly afterwards passed back into the hands of the Hindus, but was reconquered by Altamsh in 1235 A.D. It was visited by Akbar in 1601, and the mother of Jahangir planted a garden there, a fine gateway of which still exists. The Muhammadan buildings are numerous and of no little interest.

ROUTE 14.—DELHI

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Delhi * (lat. 28° 39', long. 77° 16', population 232,837 in 1911), the old Mughal capital,

and by the Imperial Proclamation on the 12th December 1911, on the occasion of the Darbar, once-

more re-established as capital by H.M. King George V., is in point of numbers the seventh city in India.

A new temporary city on the N. of the present city has been built for the accommodation of the Government of India and its secretariat staff, which will be occupied until such time as the buildings of the new capital, projected to the S. and W. of the old city, are ready for occupation. Considerable progress had been made by the end of 1916 with the work of building the new capital. The levelling of the site has been completed. Many of the principal roads in the lay-out have been metalled for a portion of their projected width and planted with trees. The foundations and basements of the Secretariat buildings and of Government House have been partially completed. Some of the residential accommodation for officers, clerks, and menials has been built. Some work has also been done in connection with the building of the new Cantonment, which lies 2 m. to the W. and S.W. of the new capital. Some of the recently erected barracks are occupied by troops. In pursuance of this policy the Delhi Chief Commissionership has been constituted (without a Legislative Council) since the 1st October 1912 immediately under the management and authority of the Governor-General. The area of the Delhi District and province is 366,565 acres. It has a population, (including Delhi town), of 416,656 persons. It includes within its boundaries the whole of the Delhi *tahsil* of the old Delhi District of the Panjab, such parts of the Ballabgarh *tahsil* of the same unit as are included in the police station of Mahrauli, and 65 villages formerly belonging to the Meerut District of the United Provinces. The adjoining Gurgaon and Rohtak Districts have been enlarged so as to include the portions of the old Delhi District not absorbed in the Delhi Chief Commissionership. The headquarters of

the Commissioner's Division have been transferred from Delhi to Ambala.

Delhi is famous for its jewellers, silversmiths, and embroiderers, and many artistic products of other parts of India will be found in its shops, the principal workers being situated in the centre and E. end of the Chandni Chauk.

The railway station, now one of the largest in India, lies on the N. side of the city; the Queen's Gardens separate it from the Chandni Chauk, which forms a street running E. and W. from the Fort and Palace, on the Jumna, to the Fatehpuri Mosque, near the Lahore Gate. Facing the S.W. angle of the Fort is the great Jami Masjid. In the N. wall of the city are the Kashmir and Mori Gates; at the N.W. corner the Kabul Gate; below it the Lahore Gate; at the S.W. corner the Ajmer, and at the S. the Delhi Gate. Of these gates, only the Kashmir, Ajmer, and Delhi Gates now survive in their original forms. Outside the N. wall lies the civil station, bounded on the E. by the river and on the W. by the Ridge, beyond which the Cantonment lay in 1857. S. of the modern city, which should properly be known by the name of Delhi-Shahjahanabad, the ruins of old cities and fortresses stretch for 12 m. to the S.—first Firozabad, then Indrapat, with the tomb of the Emperor Humayun and the Shrine of Nizam-ud-din Aulia beyond it; then, at a considerable interval farther to the S.W., the ruins of the defences of Siri, Jahanpanah, and the Fort of Rai Pithora, in the citadel of which are situated the Kutb Mosque and Minar, 11 m. from Delhi, and, finally, 5 m. E. of the Kutb, the remains of Tughlakabad and the fortress round it.

The sights of Delhi cannot be comfortably seen in less than four or five days. For those who can spare only three days to them, the

following itinerary may be of use:—

1st Morning.—Fort and Palace, Jami Masjid, Kalan Masjid, Jain Temple, and Chandni Chauk.

Afternoon.—Firozabad and Indrapat.

2nd Morning.—Visit sights outside the city in connection with the Mutiny and Siege, driving out by the Kashmir Gate and returning by the Mori Gate.

Afternoon.—Drive by the mausoleum of Ghazi-ud-din to Jai Singh's Observatory and Safdar Jang's Tomb, and round by the tomb of Nizam-ud-din Aulia to that of Humayun, and so back past Indrapat.

3rd Day.—Starting early, drive to Kutb (perhaps stopping *en route* to see the tank of Hauz Khas). After an early luncheon, proceed to Tughlakabad, and back by the Mutttra Road to Delhi.

This itinerary can of course be considerably shortened by the use of a motor-car. Cars can now be obtained on hire at a number of garages in Delhi.

History.¹—Though the country round Delhi was connected with the early history of India, as recorded in the *Mahabharata* (Introd. p. lxxi), but little is known of the place prior to the Muhammadan conquest in 1193 A.D. According to tradition, a city called Indraprastha was founded by a king called Yudhishtira, and the fort of Indrapat, also called Purana Kila, or "Old Fort," stands, perhaps, on the site of this, though the recent extensive excavations have revealed no remains which can be referred definitely to pre-Muhammadan times. The extensive ruins lying S. of modern Delhi, and covering

an area of about 45 sq. m., are the remains of many forts or cities, built by different kings. The oldest are the Hindu forts of Lalkot, built by Anang Pal Tomar in 1052 A.D., and of Rai Pithora, Chauhan, the Prithvi Raja, built by the King of that name about 1180 A.D. These two forts and the iron pillar at the Kutb are the only remains of the Hindu period. The earliest Muhammadan forts or cities were Siri, built by Ala-ud-din in 1304 A.D.; Tughlakabad, built by Tughlak Shah in 1321 A.D.; and Jahanpanah, enclosed by Muhammad Tughlak, about 1325 A.D. Subsequently Firozabad was constructed by the Emperor Firoz Shah Tughlak, and the Purana Kila was founded and built by Humayun and Sher Shah. This new Delhi was not favoured by the Emperors Akbar and Jahangir, and the modern town dates from the commencement of the fort by Shah Jahan in 1638, whence it was called Shahjahanabad. Delhi has been frequently attacked and often captured since it was conquered by the Muhammadans of Ghor and became the temporary capital of the Muhammadan empire of India. It was sacked by Timur, the Mughal, in 1398; by Nadir Shah, the Persian, in 1739; and by Ahmad Shah Durani, the Afghan, in 1756. On the 10th March 1739 the small Persian garrison which Nadir Shah had introduced into the city when he occupied it was almost entirely put to the sword by the people. On the 11th he gave his troops, who had been summoned from the encampment outside the city, orders for a general massacre. From sunrise till 12 o'clock Delhi presented a scene of appalling carnage, the horrors of which were increased by the flames ignited in almost every quarter of the capital. The Mughal Emperor Muhammad Shah then interceded

¹ Those interested in the history and archaeology of Delhi will find the fullest details in *Delhi Past and Present*, by Mr H. C. Farnshawe, C.S.I., formerly Commissioner of the Delhi Division. John Murray.

for the people, and Nadir Shah replied, "The Emperor of India must never ask in vain," and commanded the massacre should cease. A vast multitude of persons had, however, perished, and Nadir Shah carried with him from Delhi treasures estimated at from 30 to 70 millions sterling, the famous Peacock Throne, and the Koh-i-nur diamond.

In 1759 the Mahratta Chief, Mahdaji Scindia, captured Delhi, and the Mahrattas held it till September 1803, when General Lake defeated Louis Bourquin, commanding Scindia's army, and gained possession of Delhi and of the family and person of the Emperor Shah 'Alam. In October 1804 Delhi was besieged by the Mahratta Jaswant Rao Holkar, but was successfully defended by the British under Generals Burn and Ochterlony. From that time to 1857 the old capital of India remained in the possession of the British, although the descendants of the Mughal were allowed some show of royalty and the name of King. The last King, Bahadur Shah, succeeded in 1837, and was about eighty years old when the Mutiny broke out. With his death at Rangoon, in 1862, the last vestige of the Mughal dynasty disappeared.¹ Till 1857 Delhi and the surrounding districts as far as Gurgaon, Hissar, and Karnal, were under the administration of the N.W.P., but in 1858 they were placed under the Panjab Government.

The buildings in and round Delhi may be conveniently classified as follows, according to their dates and styles. The so-called early Pathan style is really Turki, but the old nomenclature is generally followed:—

¹ A list of Sovereigns who reigned at Delhi from 1193 will be found on p. lxxv, Intro.

(1)

Early Pathan, 1193-1320.

The Kutb Mosque and Minar—the tomb of Altamsh; the Alai Darwaza (p. 279) and the Khizri or Jamat Khana Mosque at Nizam-ud-din (p. 273).

At first, adoption and adaptation of Hindu materials and style; then developments of elaborate and beautiful decoration from Hindu prototypes.

(2)

Middle Pathan, 1320-1414.

Earlier style.—Tughlakabad and tomb of Tughlak Shah (pp. 281-2).

Later and severer style—Kalan Masjid of Delhi (p. 264); mosque of Kotila Firoz Shah (p. 270); Kadam Sharif (p. 266); ruined buildings on the Ridge (pp. 268-9); Hauz Khas tomb (p. 275); mosques at Nizam-ud-din, Begampur, and Khirki (pp. 273, 275, and 281).

First buildings of finely-cut stone, or of red sandstone with sloping walls; then buildings with sloping walls of stone and mortar plastered all over, and borne by rough columns of simple rectangular stones; arches usually flat Hindu arches; mosques generally built on high raised platforms.

(3)

Later Pathan Style, 1414-1556.

Tombs of Saiyad and Lodi Kings (p. 274); *Purana Kila and Mosque* (p. 271); Jamali Mosque (p. 280); tomb and mosque of Isa Khan (p. 273).

Buildings usually with fine domes, and decorated with coloured marbles and tiles, and in some cases inside with fine plaster ornamentation; arches still often of the Hindu type.

(4)

Mughal, 1556-1660.

Earlier. — Tomb of Humayun (p. 272); tomb of Azam Khan (p. 274); Fort and Palace of Delhi (p. 259); Jami Masjid, Delhi (p. 263); Fatehpuri Masjid, Delhi (p. 266).

Later decadent style.—Zinat-ul-Masajid Mosque (p. 263); Moti Masjid at Mahrauli (p. 281); Sonehri Masjids in Chandni Chauk (p. 266), and of Javed Khan (p. 263); mosque, tomb, and college of Ghazi-ud-din Khan (p. 264); tomb of Safdar Jang (p. 274).

Buildings at first of red sandstone and white marble, later of fawn-coloured sandstone; white marble used more and more. Fine domes, true arches, and lofty minarets are special characteristics of the style.

The Mutiny, 1857.

As the principal events of the great mutiny of the Bengal army in 1857 centred originally round Delhi, it is desirable to give a somewhat detailed account of them in this connection.

On the 10th of May 1857 there was in the large Cantonment of Meerut, 42 m. N.W. of Delhi, a British force consisting of a battalion of the 60th Rifles, a regiment of Carabineers, and a large force of Artillery, though only two field-batteries were fully equipped. The Indian troops were one regiment of Cavalry (the 3rd) and two regiments of Infantry (the 11th and 20th)—in all about 2500 strong.

On the evening of that date, Sunday, the troopers, and after them the two regiments, broke into mutiny, and released eighty-five men of the 3rd Cavalry, who had been imprisoned the previous day. The mutineers were not attacked by the British troops, and after a brief period of murder and robbery

they started unpursued for Delhi, where there were three native regiments and a battery of Native Artillery, but no British troops. On reaching that place early the next morning, the troopers who arrived first called upon the King from below the palace walls to join them, and then made their way into the city and attacked the civil officers, who had received news of the outbreak at Meerut, and were attempting to prevent the mutineers from entering. These officers, the Commissioner (Mr Simon Fraser), the Collector (Mr Hutchinson), and Captain Douglas, Commandant of the Palace, were compelled to fall back into the Fort, and were there shortly afterwards murdered by the mob. When the 54th Regiment marched down from the Cantonment to the Kashmir Quarter Guard at the N.E. corner of the city most of the officers were shot down by the troopers, and the men of the regiment refused to act—an example followed by the 74th Regiment, which was sent down later. Meanwhile the officer in charge of the Arsenal, Lieutenant Willoughby, who had been forewarned by the civil magistrates, made a desperate attempt with his subordinates to hold that place against the mutineers until aid should arrive from Meerut, and when defence was no longer possible, blew up the magazine, and managed to escape to the Kashmir Gate with some others. After the explosion the troops there broke out into open mutiny, and shot most of the remaining officers, a few escaping over the face of the Kashmir Bastion. The Europeans in the Cantonment, who had collected at the Flagstaff Tower, were then compelled to take flight to Karnal. Before nightfall every vestige of British power had disappeared from Delhi. Measures were at once taken by General Anson, the Commander-in-Chief of the army, who was at

Simla, to collect troops for the recapture of Delhi, and by Sir John Lawrence and the officers of the Panjab to anticipate the mischief of further mutiny. With what success the latter acted will be found under various heads in Routes 15 and 16. The troops collected were unable to advance for some time, owing to the usual state of unpreparedness prevailing at that period, and reached Alipur, 10 m. from Delhi, under the command of Major-General Sir H. Barnard (General Anson having died of cholera at Karnal on 27th May) only on 5th June. There the Ambala force was joined by that from Meerut under Brigadier-General Archdale Wilson, who had defeated the rebels twice near Ghaziabad (p. 293).

On the following day the combined forces marched on Delhi, and found the rebels well posted and supported by thirty guns 6 m. N. of Delhi, at the village of Badli-kisara. Attacking the mutineers, General Barnard gained a complete victory. The most important result of this success was to give the British possession of "the Ridge," from which all subsequent operations against Delhi were made.

The tents of the British were pitched a little to the rear of their old houses, behind the left and centre of the Ridge, obliquely to the front of attack, and effectually concealed from the besieged. The position on the extreme right invited attack. It was surmounted by an extensive building known as Hindu Rao's House. A strong body of troops was posted here and in an old observatory near it. About 800 yds. to the N. of Hindu Rao's House, and on the Ridge, was an old mosque, and again 800 yds. to the N. was the Flag-Staff Tower, a double-storeyed circular building—a good post for observation, and strong enough to afford shelter to troops. At these four points General Barnard estab-

lished pickets supported by guns. Below Hindu Rao's House, on the right flank, was the suburb of Sabzi-mandi, which, with its houses and walled gardens, afforded shelter to the enemy, and was, in fact, the key of the English position. Beyond Sabzi-mandi, towards the Kabul Gate, were the suburbs of Kishanganj, Trevelyanganj, Paharipur, and Teliwara—all strong positions, which covered the enemy when they advanced to the attack, but were too near the city walls for us to occupy. Opposite the mosque picket, to the E., was Metcalfe House, on the banks of the Jumna, with substantial outbuildings, and a mound in the rear, which seemed to recommend it for occupation. Between it and the city was an old summer palace of the Emperor, the Kudsia Garden, with lofty gateways and spacious courtyards, and in a line between the latter and Hindu Rao's House was Ludlow Castle, the house of the late Commissioner Simon Fraser." To take this great walled city General Barnard had a force of about 3000 British, one Gurkha battalion, the Corps of Guides, the remnant of certain native regiments, and twenty-two guns. At first it was intended to assault the city by night, but, as failure would have been disastrous, it was considered best to delay till the expected reinforcements had arrived. Between the 12th and 18th June the rebels attacked the British position four times in front and rear. Again on the 23rd, the anniversary of Plassey, they attacked fiercely, having been reinforced by the mutineers from Nasirabad; fortunately the British by that time had received an additional 850 men.

¹ The best account of the Siege of Delhi is Captain Norman's Narrative, republished in *Delhi, Past and Present*. Those who desire a concise account, without military technicalities, cannot do better than refer to Holmes' *Indian Mutiny*.

On the 24th General Chamberlain arrived, and with him the 8th and 61st Europeans, the 1st Panjab Infantry, a squadron of Panjab Cavalry, and four guns, raising the British strength to 6600. The rebels also received an accession of about 4500 from Bareilly.

On the 5th July General Barnard also died of cholera, and was succeeded by General Reed.

On the 9th and 14th of July fierce engagements were fought on the right of the British position, near Hindu Rao's house, in and about the Sabzi-mandi, in which 25 officers and 400 men of our force were killed and wounded.

On the 17th of July General Reed resigned the command to Brigadier-General Archdale Wilson. At this time the besieging force was in great difficulties: two Generals had died, a third had been compelled by illness to resign, the Adjutant-General and Quartermaster-General lay wounded in their tents, and the rebels had attacked so often, and with such obstinacy, that it had come to be acknowledged that the British were the besieged and not the besiegers. On the 18th of July the rebels made another sortie, which was repulsed by Colonel Jones of the 60th Rifles. The Engineer officers now cleared away the walls and houses which had afforded cover to the enemy, and connected the advanced posts with the main pickets on the Ridge. After this there were no more conflicts in the Sabzi-mandi. On the 23rd of July the enemy streamed out of the Kashmir Gate, and endeavoured to establish themselves at Ludlow Castle. They were driven back, but the English were drawn too near the city walls, and suffered severe loss.

Reinforcements were now on their way from the Panjab, commanded by one of the best soldiers that India had ever produced—Brigadier-General Nicholson.

On the 7th of August Nicholson stood on the Ridge at Delhi. He had come on in advance of his column of 2500 men, which arrived on the 14th.¹ On the 25th he marched out to the S.W. towards Najafgarh with a strong force to attack the mutineers, who had moved to intercept the siege train coming from Ferozepore. The march was a difficult one, through deep mud. He found the mutineers in three bodies, occupying two villages and a garden in front, all protected by guns. Crossing a ford where the water was breast-high, Nicholson, at the head of the 61st Regiment and the 1st Bengal European Fusiliers, stormed the garden and captured the guns; but the sepoys fought well and sold their lives dearly. Those who survived made for the bridge crossing the Najafgarh Canal, and fled to Delhi; in all 800 were killed and thirteen guns were captured. General Nicholson blew up the Najafgarh Bridge, and returned to camp next day.

On the morning of the 4th of September the siege guns, drawn by elephants, with an immense number of ammunition wagons, reached the camp. On the 6th the rest of the Rifles from Meerut marched in. On the 8th the Jammu Contingent arrived, with Colonel R. Lawrence at their head. Many, and amongst them foremost of all Nicholson, chafed at the delay which occurred in storming Delhi. The responsibility of the attack rested with General Archdale Wilson, who had thus stated the magnitude of the enterprise in a letter to Colonel Baird Smith, commanding the Engineers, on the 20th of August: 'Delhi is 7 m. in circumference, filled with an immense fanatical population, garrisoned by fully 40,000 soldiers, armed and discip-

¹ Between 15th and 22nd August Lieutenant Hodson made his successful cavalry raid to Rohtak, and cut up and scattered the rebels there.

lined by ourselves, with 114 heavy pieces of artillery mounted on the walls, with the largest magazine of shot, shell, and ammunition in the Upper Provinces, besides some 60 pieces of field artillery, all of our own manufacture, and manned by artillerymen drilled and taught by ourselves, the Fort itself, having been strengthened by perfect flanking defences, erected by our own engineers, and a glacis which prevents our guns breaching the walls lower than 8 ft. from the top.' These circumstances led General Wilson to write that the chances of success were, in his opinion, anything but favourable, but that he would yield to the judgment of the Chief Engineer. Many condemned his apparent reluctance to order the assault, but they have since acknowledged that they did him less than justice, for the principles of warfare were upon his side.

Investment by the British, with their limited means, being impossible, it was necessary to concentrate all their breaching power on a portion of the walls. This consisted of the Mori, Kashmir, and Water Bastions, with their connecting curtains. This front was chosen because the fire of the Mori Bastion alone commanded the approach to it, and because there was excellent cover to within a short distance of the walls. On the evening of the 6th of September a light battery,¹ consisting of six 9-pounders and two 24-pounders, under the command of Captain Remington, was constructed on the plateau of the Ridge to protect the operations going on below. On the night of the 7th the first heavy battery² was constructed at 700

yds. from the wall. It consisted of two parts connected by a trench. The right portion held five heavy guns and a howitzer, the function of which was to demolish the Mori Bastion. The left held four guns to keep down the fire of the Kashmir Bastion. While darkness lasted the enemy only fired twice, but when the morning revealed the British plans, the rebels poured in a shower of shot and shell; but the British persevered in their work, and before sunset the rebel battery was silenced. The British had lost 70 men in the trenches. The left section of their battery maintained a fire on the Kashmir Bastion during the greater part of three days, but at noon on the 10th it took fire, and the guns were of necessity withdrawn. By that time No. 2 Battery had been finished—the left section immediately in the front of Ludlow Castle, and the right section 90 yds. to the S. of it. Both were within 600 yds. of the city; the right section had seven howitzers and two 18-pounders, and the left section nine 24-pounders.

This battery did not open fire till No. 3 Battery was completed. It was built in the Kudsia Garden, behind part of the Custom House, at 180 yds. from the Water Bastion, on which it was to play. The enemy poured in such an incessant fire of musketry, with occasional shells, that it was impossible to work in the day and difficult at night. Meantime a powerful mortar battery was also constructed in the Kudsia Garden. At 8 A.M. on the 11th of September the nine 24-pounders in the left section of No. 2 Battery opened with terrific effect on the Kashmir Bastion. The enemy replied, and severely wounded the commandant of the heavy guns, but their fire was soon silenced by No. 2 Battery, aided by the mortars in the Kudsia Bagh. Then the walls of Delhi began to fall, and whole yards of parapet came

¹ This was known as the Sammy House Battery, and lies 400 yds. E. of the Mutiny Memorial.

² The sites of this battery, 400 yds. to the E. of the foot of the slope of the Ridge below the Mutiny Memorial, will be found inside the Police Lines, and behind a house to the N. of these.

down. At 11 A.M. on the 12th No. 3 Battery unmasked and pounded the Water Bastion into ruins. All through the 12th and 13th the roar of fifty heavy guns was heard day and night, without intermission. On the 13th Alexander Taylor, of whom Nicholson said, 'If I survive to-morrow I will let all the world know that Aleck Taylor took Delhi,' announced that the breaches were practicable.

The arrangements for storming Delhi were forthwith made. The 1st column, under Nicholson, consisted of 300 men of the 75th Foot, 250 of the 1st Fusiliers, and 450 of the 2nd Panjab Infantry. It was to storm the breach in the curtain near the Kashmir Bastion. The 2nd column, under Brigadier Jones, C.B., was to storm the breach at the Water Bastion, and it consisted of 250 men of the 8th Foot, 250 of the 2nd Fusiliers, and 350 of the 4th Sikhs. The 3rd column, under Colonel Campbell, of the 52nd, was to assault the Kashmir Gate, and consisted of 200 men of the 52nd Foot, 250 of the Kumaon Battalion, and 500 of the 1st Panjab Infantry. The 4th column, under Major Charles Reid, who so long and gallantly held the post at Hindu Rao's house, was to enter the city by the Lahore Gate. It consisted of 860 men of the Sirmur Battalion, the Guides, and other corps. The 5th column, the Reserve, was commanded by Brigadier Longfield, and consisted of 1700 men. Besides these five columns, Colonel Hope Grant, with 600 sabres of the 9th Lancers and Sikh Horse, whose duty it was to prevent sallies from the Lahore and Kabul Gates, were for long under heavy fire.

On the night of the 13th Lieutenants Medley and Lang explored the Kashmir breach, and Lieutenants Greathed and Home that of the Water Bastion. The morning of the 14th was fine and

still. Nicholson laid his arm on Brigadier Jones's shoulder, and asked him if he was ready. He then rejoined his own column, gave the order to storm, and immediately the heavy guns, which were roaring at their loudest, became silent. The Rifles sounded the advance, and the 1st and 2nd columns ascended the glacis. The fire of the enemy was terrible, and the Engineers Greathed and Ovenden were the first to fall. The stormers, carrying the ladders, were led by Captain Baines and Lieutenant Metje. When Baines reached the Water Bastion he had only twenty-five men left out of seventy-five. Both he and Metje were carried disabled to the rear. The 1st column was divided into two sections. Nicholson himself led one, and Colonel Herbert of the 75th the other. Nicholson was the first to mount the wall. In the other section Lieutenant Fitzgerald, who was the first to ascend, was shot dead. Another took his place, and soon both sections of the 1st column had carried the breach near the Kashmir Bastion, and taken up their position at the Main Guard. The 2nd column entered by the breach at the Water Bastion, and joined the 1st column at the Quarter Guard. These columns then proceeded along the inner side of the city wall to the Mori or Shah Bastion at the N.W. angle, where the rebel gunners fought gallantly and were bayoneted at their guns. The columns then advanced and took the Kabul Gate, on which a soldier of the 61st planted a flag. The enemy kept up a galling fire on this from the Lahore Gate. Nicholson collected a number of men to storm it. As he advanced he found himself in a long narrow lane lined with marksmen on both sides. Some of the enemy's guns were brought to bear on the attacking column, and the men fell fast. Major Jacob, of the

1st Fusiliers, received his death-wound, Captain Greville and Lieutenant Speke were struck down. The column wavered; Nicholson rushed forward, his lofty stature rendered him conspicuous, and in a moment he was shot through the body, and in spite of his remonstrances was carried to the rear to die, and the columns fell back to the Kabul Gate. He died of his wound ten days later.

The 3rd column had been appointed to enter the city through the Kashmir Gate, which was to be blown open by Lieutenants Home and Salkeld, Sergeants Carmichael, Burgess, and Smith. Home, with Bugler Hawthorne, was first down into the ditch. He planted his bag, but as Carmichael advanced with his, he was mortally wounded. Smith then advanced, and placed his dying comrade's bag as well as his own and prepared the fuses for ignition. Salkeld was ready with a slow match, but as he was lighting it he received two bullets, and, falling, he called on Smith to take the match, which was taken by Burgess, and Smith was in the act of giving him a box of lucifers when Burgess also fell with a bullet through his body. Smith was now alone, but he had struck a light, and was applying it when a portfire went off in his face. There was a thick smoke and dust, then a roar and a crash, as Smith scrambled into the ditch. There he placed his hand on Home, who said he was unhurt, and having joined the column, went forward. The gate had been shattered, but not so destroyed as had been anticipated; but the 3rd column passed through it. Smith then obtained stretchers, and had Burgess and Salkeld carried to the camp; but both of them died—Burgess on the way, and Salkeld a few days afterwards."

The 3rd column, which was immediately joined by the reserve,

pushed across the Queen's Garden and Chandni Chauk to the Kotwali, under the guidance of Sir T. T. Metcalfe, and then down the Dariba to the Jami Masjid. This, however, was strongly defended and held, and as the column was without guns or means of blowing in the gates, it was compelled to fall back when the advance on the Lahore Gate failed. In spite of the losses of the assault (66 officers and 1100 men), the British force maintained itself in the N.W. corner of the city, as far S. as the College, and, in spite of regrettable excesses on the part of the troops, gradually captured the whole city. On the 16th the Magazine was taken, and posts were established from it to the Kabul Gate during the 17th and 18th, the troops working from house to house under cover. On the 19th the Burn Bastion, between the Kabul and Lahore Gates, was seized, and on the next morning the latter gate was captured, and cavalry, entering by the Delhi Gate on the S., occupied the Jami Masjid; and on the 20th the Fort and Palace were taken, very little opposition being offered by the few rebels left in it. On the 21st the King was captured by Lieutenant Hodson at Humayun's tomb, and on the following day the same officer received the surrender of the King's sons at the same place, and shot them in front of the Delhi Gate. On 24th September a column under Colonel Greathed marched S. from Delhi, and on 10th October relieved Agra (p. 232); on the day that it left Brigadier-General Nicholson was buried in the Kashmir Gate Cemetery.

The number of troops engaged on the Siege of Delhi from first to last was 9866, of which no less than 3837 were killed or died of wounds or were wounded. These included 46 European officers killed and 140 wounded. No more marked display of endurance and steady courage than that

shown by the Delhi Field Force during the summer of 1857 can be found in the whole splendid record of the British and Indian armies.

For the convenience of sight-seeing, Delhi and the adjoining country may be divided as follows:

(1) The city, including the old Magazine, the Fort and Palace, the Jami Masjid and Kalan Masjid, and the Chandni Chauk.

(2) The tract lying N. of the city walls, with which the principal incidents of the Siege of Delhi and the Imperial Assemblages are concerned.

(3) The tract lying immediately S. of the city, and including the ruins of Firozabad, the Purana Kila, the Mausolea of the Emperor Humayun and Nawab Saïdar Jang, and Nizam-ud-din Aulia, the Saiyad and Lodi tombs, and Jai Singh's Observatory.

(4) The tract lying still farther S., including the tomb of the Emperor Firoz Shah at Hauz Khas, Siri, Jahanpanah, Kila Rai Pithora, the citadel of Lal Kot, with the Kutb Minar and Mosque, and Tughlakabad 5 mf. to the E. of these.

(1) The City.

On the outer face of the Kashmir Gate is a memorial tablet of the Explosion Party. The first was erected by Lord Napier of Magdala, the present one by Lord Minto in 1910. On the inside the outlines of the Quarter Guard, in which so many European officers were murdered on the 11th May 1857, are still traceable; on the N. side a staircase leads on to the walls just above the main breach, and from here and from the adjoining bastion a fine view is had of the vistas cut to the points where No. 1 and No. 2 Siege Batteries were established. E. of the Quarter Guard are the Dis-

trict Courts and the second breach at the side of the Water Bastion.

In front of the Gate is **St James' Church**, built by Colonel Skinner, C.B., whose Delhi residence stood on the opposite side of the clear space here; in the churchyard are the old dome-cross bearing the marks of bullets fired at it in 1857, a memorial cross to the victims of the Mutiny, and the graves of the Skinner family and of Mr William Fraser, murdered in 1835, and of Sir T. Metcalfe; and inside the church are a number of memorial tablets. 200 yds. S. of the gate is the Cambridge Mission College on the right, and 200 yds. farther, upon the left, the High School building, once the Delhi College, and before that the Residency. Its occupation as a Residency dates from the time of Sir D. Ochterlony: a portion of the building was formerly the library of Prince Dara Shikoh. The road now divides into two branches with a long grass plot in the centre. At one end of the latter is the granite memorial of the officers of the Telegraph Department who fell in 1857. Further along the same plot and opposite the Post Office stand the gateways of the old Magazine. Over the central gate of the Magazine is a memorial of Lieutenant Willoughby and the eight heroic men¹ who shared in its defence; in the S.E. corner at the back may still be seen the steps by which the survivors escaped to the Kashmir Gate. The road now passes the oldest cemetery in Delhi on the left; and beyond the arch of the railway bridge the main thoroughfare (which branches to the railway station on the right, and on the left to the ghats and the Jumna bridge) ascends the slope in front to the Mughal Fort and Palace,

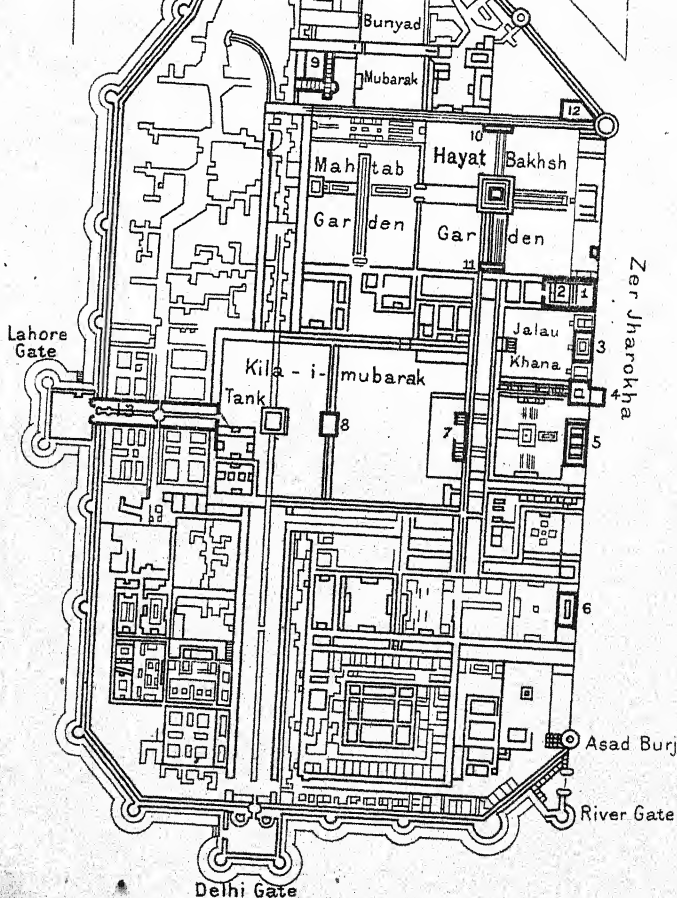
¹ Lieutenants Raynor and Forrest, Conductors Shaw, Scully, and Buckley, Sub-Conductor Crow, Sergeants Edwards and Stewart.

Plan of the
PALACE of DELHI
before 1857
Scale of Feet

0 400 800

N

- 1 Hammam or Baths
- 2 Moti Masjid
- 3 Diwan-i-Khas
- 4 Tasbih Khana & Musamman Burj with river wicket & steps to this below it
- 5 Rang Mahal
- 6 Mumtaz Mahal
- 7 Diwan-i-Am
- 8 Nakkar Khana
- 9 Baoli Well
- 10 Bhadon Pavilion
- 11 Sawan Pavilion
- 12 Shah Burj Pavilion
- 13 Vaulted Entrance Arcade



River Jumna Bed

Zer Jharokha

Asad Burj

River Gate

Delhi Gate

built by the Emperor Shah Jahan between 1638-48.

There are two fine gates to the Fort, as at Agra, the one in the centre of the W. side and facing the E. end of the Chandni Chauk being called the Lahore Gate, and the other at the W. corner of the S. side, and named the Delhi Gate. A fine view of the magnificent red sandstone wall (from whence the name Lal Kila or Red Fort) is obtained by walking along the ditch to the N.W. corner, where the three bridges between the Fort and the Salimgarh may be seen, and the traditional site of the Dasaswamedh and Nigambodh ghats, where the Imperial Horse sacrifice was performed by Yudhishthir (Introd. p. lxxii), and the sacred Vedas were recovered from the bottom of the ocean.

Entering the forework erected by the Emperor Aurangzeb in front of the Lahore Gate, and passing under its grand archway, it will be found that the route beyond leads under a vaulted arcade (see plan of Fort and Palace), which Mr Fergusson (*Ind. Arch.*, 2, 309) considers to be the noblest entrance known to belong to any palace. From the octagon in the centre of it a gateway to the left conducts to the steps leading up to the rooms (now private quarters) over the Lahore Gate. At the foot of these, on the 11th May 1857, was killed the Commissioner of the Division, and in the rooms above were murdered the wounded Collector and Commandant, the Chaplain, and two ladies. The vaulted arcade ends in the centre of the outer court, which measured 540 ft. by 360 ft., of which the side arcades and central tank have been removed; round the edge of the latter were murdered, on 16th June 1857, some fifty Christians who had escaped the massacre of the 11th. In the E. wall of the court was the now isolated Naubat or Nakkar Khana, the band gallery of which is 100 ft.

by 80 ft.; and here every one except Princes of the royal blood was required to dismount. The carving of the flowers on the red sandstone dado of the gateway is unusually good.¹ The inner main court to which this gateway led was 540 ft. broad and 420 ft. deep, and was also surrounded by arcade galleries, where the great feudatories used to mount guard. This space has been recently cleared of the modern military structures which so long defaced it, the courtyard being now represented by a lawn, and the arcades by shrubberies. On the farther side of it is the splendid Hall of Public Audience, the *Diwan-i-'Am* (100 ft. by 60 ft.). The proportions of this hall and of its columns and of the engrailed arches are extremely beautiful, and so far as the expression of power goes it is probably the finest of all such works; the whole of it was originally covered with brilliant chunam. At the back in the raised recess the Emperor used to be seated on his throne. Below it is the marble seat of the Wazir, and around it above are the inlaid panels executed by Austin of Bordeaux, including that of the artist as Orpheus, lately recovered by Lord Curzon from the S. Kensington Museum. The hall has been thoroughly restored by the care of that Viceroy, and a Florentine artist, Sr. Mennegatti, has renewed the inlay work of the throne recess and the plaques of the arch to the W. side of the throne. Bernier gives a full account of the splendid appearance of the hall in the time of Aurangzeb.

¹ See *Guide to the Delhi Fort Buildings and Gardens* (Archaeological Survey of India), by E. Gordon Sanderson, 1914, and *Catalogue of the Delhi Museum of Archaeology*, 1913, by the same author. Both can be obtained from the Caretaker at the Fort; also, *Catalogue of the Collection of Coins illustrative of the History of the Rulers of Delhi up to 1858 A.D.*, in the *Delhi Museum of Archaeology*, by R. B. Whitehead, I.C.S., Calcutta, 1910.

A gate on the N. side of the hall led to the innermost court of the palace, and to the *Diwan-i-Khas*, or Hall of Private Audience, in which the peacock throne used to be placed. Tavernier records a minute description of the glories of this throne, which was carried off by Nadir Shah. The following description is from Mr Beresford's *Guide of Delhi*: "It was so called from its having the figures of two peacocks standing behind it, their tails being expanded, and the whole so inlaid with sapphires, rubies, emeralds, pearls, and other precious stones of appropriate colours, as to represent life. The throne itself was 6 ft. long by 4 ft. broad; it stood on six massive feet, which, with the body, were of solid gold, inlaid with rubies, emeralds, and diamonds. It was surmounted by a canopy of gold, supported by twelve pillars, all richly emblazoned with costly gems, and a fringe of pearls ornamented the borders of the canopy. Between the two peacocks stood the figure of a parrot, said to have been carved out of a single emerald." Though the general effect of this has been spoilt by the unnecessary removal after the Mutiny of the marble pavement in front of it and of the arcaded court which once enclosed it like the *Khas Mahal* at Agra (p. 238), it is still one of the most graceful buildings in the world, though its elegance shows a certain amount of approach to weakness. It measures 90 ft. by 67 ft., and is built wholly of white marble inlaid with precious stones; the ceiling, which was once of silver, and was removed by the Jats or *Mahrattas*, has been restored in wood. At either end of the hall, over the two outer arches, is the famous Persian inscription—

"Agar Fardaus bar ru-i-zamin ast
Hamin ast wa hamin ast wa hamin ast."

"If there is a Paradise on the face of the earth,
It is this, oh! it is this, oh! it is this."

The hall has many historical connections — the presence of Nadir Shah the Persian, and Ahmad Shah the Afghan, the blinding of the Emperor Shah Alam by the brutal Ghulam Kadir, the reception of Lord Lake after the Battle of Delhi in 1803, the thanksgiving service of the Delhi Field Force on the 27th September 1857, the trial of the last King of Delhi in January and March 1858, the ball given to H.R.H. the Prince of Wales by the Indian army in January 1876, and that on 6th January 1903, in honour of the coronation of the late King Edward VII. In the river-bed below the hall and the connected buildings was the space known as *Zer-Jharokha*, or Beneath the Lattices. It was here that the mutinous troopers from Meerut called upon the King on 11th May, and it was from the terrace above, between the hall and the *Royal Private Apartments*, that Captain Douglas bade them remove themselves to the South of the city. These apartments consist of three sets of rooms and of a tower called the *Musamman* (octagon) *Burj*, projecting over the river. In the centre room is a fine alabaster panel with a representation of the heavens round the Scales of Justice, *Mizan-i-adl*, and in others will be found the most beautiful decorations and pierced grilles now left in Delhi. Two of the smaller rooms have lately been filled with articles representative of those in daily use by Mughal Emperors and nobles. S. of these apartments is the *Rang Mahal*, or Painted Palace, the residence of the Chief Sultana, till lately used as a mess-house, and now placed in a state of repair, all modern additions having been removed; the marble water channel (see p. 263) runs under this also. Farther S. is another hall, the *Mumtaz Mahal*, till recently used as a sergeants' mess, and now the Delhi Museum of Archaeology. It

contains some Mutiny relics, views and plans of Delhi in former times, and an excellent collection of Mughal miniature portraits. On the N. side of the Diwan-i-Khas, and connected with it by a shallow water channel, which also passed through the Royal Apartments, are the Royal Baths. These consist of three large rooms, the flooring elaborately inlaid with *pietra dura* work, and crowned with domes, unhappily whitewashed. They were lighted by windows of coloured glass in the roof. In the centre of each room is a fountain, and in the wall of one of them a reservoir of marble.

Opposite to them, to the W., is the *Moti Masjid*, or the "Pearl Mosque," of white and grey marble. A bronze door covered with designs in low relief leads to the courtyard, 40 ft. by 35 ft. The mosque proper has three arches, and is divided into two aisles. The walls are decorated with low reliefs. It was built in 1659 A.D. by Aurangzeb; and cost Rs.160,000. Certain details in the decoration show that the elegance of late Mughal work was already beginning to degenerate into weak floridness.

To the N. of these buildings lay the fine *Hayat Bakhsh*, or Life-giving garden-court, 200 ft. square, of which till lately only the Shah Burj pavilion in the N.E. corner and the Bhaddon and Sawan Pavilions on the N. and S. sides remained. The tank and water channels have been restored as far as possible, and all modern unsightly excrescences have been removed by the influence of Lord Curzon. Beyond these the road to the N. leads to the Salimgarh, built by Salim Shah in A.D. 1546; except for the view over the river, this outwork scarcely deserves a visit. W. of the above garden was another called the *Mahtab* (moon) Bagh, and near what was the N.W. corner of it is a picturesque baoli tank. Nothing else remains of

the courts and beautiful buildings of the old palace which were so barbarously and unnecessarily removed after 1857. The road from the baoli leads due S. to the Delhi Gate of the Fort, which is inferior to the Lahore Gate; near it, on the right, the King of Delhi was imprisoned after September 1857. Between the inner and outer gates stand two large stone elephants (p. 236), without riders, replaced here by the gift of Lord Curzon. Beyond the Southern glacis of the Fort, on which a cross marks the site of the old cemetery, are the gardens of the old Cantonment of Dariaganj. This area is not now occupied by troops. The Dariaganj area is bounded on the W. by the Faiz Bazar leading to the Delhi Gate; over the Khairati Gate in the N.E. corner is the *Zinat-ul-Masajid Mosque*, built by a daughter of Aurangzeb in 1710. The house in the Cantonment numbered 5, just beyond the road to the gate, was defended for 48 hours after 11th May 1857 by a party of Europeans, of whom only two escaped finally.

From the Delhi Gate of the Fort the Khas Bazar once led to the *Jami Masjid*, and on the open space now on this side stood a number of the principal private palaces. In the Southern portion of this open space and to the left front of the *Jami Masjid* is the King Edward Memorial Garden, in the centre of which an equestrian statue of the late King Edward VII. is to be placed. To the S. are the School of the Baptist Mission, and the Empress Victoria Memorial Hospital for women, and to the W. of it are the *Jami Masjid* and Dufferin Municipal Hospital. On the left of the road and in front of the Delhi Gate is the graceful *Sonehri Masjid* of Javed Khan, built in 1751. Mr Fergusson wrote (*Ind. Arch.*, 2, 318) of the *Jami Masjid* as follows: "The *Jami Masjid* at Delhi, begun in 1644, but not finally completed till 1658, is

not unlike the Moti Masjid in the Agra Fort in plan, though built on a very much larger scale, and adorned with two noble minarets, which are wanting in the Agra example; while from the somewhat capricious admixture of red sandstone with white marble it is far from possessing the same elegance and purity of effect. It is, however, one of the few mosques, either in India or elsewhere, that is designed to produce a pleasing effect externally. It is raised on a lofty basement, and its three gateways, combined with the four angle towers and the frontispiece and domes of the mosque itself, make up a design where all the parts are pleasingly subordinated to one another, but at the same time produce a whole of great variety and elegance. The mosque itself is 201 ft. in height by 120 ft., and is flanked by two minars 130 ft. high, formed in alternate vertical stripes of sandstone and white marble, and crowned by light marble pavilions. Its principal gateway cannot be compared with that at Fatehpur-Sikri; but it is a noble portal, and from its smaller dimensions more in harmony with the objects by which it is surrounded." The three noble gateways are approached by grand flights of steps, unrivalled elsewhere, except at Fatehpur-Sikri. As of old, the great doors of the main (E.) gateway were opened only for the Mughal Emperor, so now they are opened only for the Viceroy of India and the Head of the Local Administration, but other visitors can enter from this side by the wicket in the doors. These are massive and overlaid with brass arabesques half an inch thick. Inside them is the stately quadrangle, 325 ft. square, in the centre of which are a marble basin and fountain. Round three sides of the quadrangle runs an open sandstone cloister, 15 ft. wide, with pillars of the same material. The mosque

proper is 200 ft. long and 90 ft. broad. The inscription on the front gives the date in Arabic as 1658 A.D., the year in which Aurangzeb deposed his father, Shah Jahan; it is found in the single word "Ya Hadi," "Ah the Guide," on the centre panel. Visitors entering any part of the floor space of the mosque are required to envelop their boots with covers provided there. The three white marble domes are relieved by thin vertical lines of black marble. The two minarets rise to the height of 130 ft. They are reached from the S. gate over the roof of the arcade. At the N.E. corner of the court is a pavilion in which are placed relics of the Prophet Muhammad. The view of the Fort walls from the galleries on the E. side of the court is very fine; and that of the outside of the back wall of the mosque from the W. is most impressive. From there the Chaura Bazar leads S.W. to the Kazi Hauz and the Lal Kua Bazar, which is the principal thoroughfare of the S.W. side of the city, and extends up to the Fatehpuri Masjid. S. from the Kazi Hauz one main street runs past the Kalan Masjid to the Turkman Gate, and another continues W. to the Ajmer Gate and the mausoleum of Ghazi-ud-din Khan outside it. The Kalan (Great) Masjid, popularly known as the Kala (Black) Masjid, was once included within the limits of Firozabad, and was built by the Emperor Firoz Shah in 1386. The outside consists of two storeys, of which the lower, forming a kind of plinth to the actual place of worship, is 28 ft. high, the total height to the top of the battlements being 66 ft. "The sloping style of the architecture seems peculiarly illustrative of the buildings of that and earlier periods. The sloping pilasters on each side of the main entrance give somewhat of an Egyptian appearance to the front of the building, which

is not dissimilar from those of the more ancient remains of Hindu architecture. . . . The peculiar construction of the arches and domes, the stones of which are held together by the wonderful adhesive qualities of the lime used in those days, without any key-stones, is characteristic of the Muhammadan Indian buildings of the 14th century" (Carr Stephen). The walls, which are very thick, have in the upper storey a number of openings, filled with red stone screens, now much mutilated; the arcades are supported by plain square columns of stone. There is a stern look about this sombre building, the plan of which, Bishop Heber says, "is exactly that of the original Arabian mosques—a square court surrounded by a cloister, and roofed with many small domes of the plainest and most solid construction." To the E. of the mosque is the tomb of Turkman Shah, who was styled the "Sun of Devotees." He died in 638 A.H. = 1240 A.D., in the time of Muizz-ud-din Bahram Shah, and his grave is therefore one of the oldest of those near modern Delhi. Near the Turkman Gate is the successful Christian Church built in 1904.

A little to the N. of this saint's grave in the Bulbuli Khana is the tomb of Sultan Raziya, daughter of the Emperor Altamish, and the only Muhammadan Queen-Empress of India, who ruled from 1236 to 1240; she was killed in flight from a battle in which she sought to recover her throne. The mausoleum at the Ajmer Gate is enclosed in a modern horn-work. It was constructed about 1710 by Ghazi-ud-din Khan, father of the first Nizam of Hyderabad, whose son, Ghazi-ud-din, is also buried here, and whose grandson, Ghazi-ud-din (Imad-ul-Mulk), played a prominent part in the saddest events connected with the fall of the Mughal empire. In addition to the graves standing in a small

enclosure surrounded by panels of pale-coloured sandstone, some pierced and some carved with flowers, there are a mosque and a college, the latter now occupied by the Anglo-Arabic School. The wooden doors in the Ajmer Gateway are interesting as being similar to those of the Kashmir Gate, blown in on 14th September 1857.

Close to the Jami Masjid, on the N.W. side, is a Jain Temple, approached by narrow streets. It stands upon a high, walled platform, gained by narrow steps, and consists of a small marble court surrounded by a stucco colonnade, in front of the temple proper, which is surmounted by an oblong dome. Within the ceiling and walls are richly gilded, and are supported by two rows of small marble columns. In the centre of the temple is a pyramidal platform in three tiers, upon which rests the small figure of a Jain saint, seated beneath an elaborate ivory canopy. Mr Fergusson¹ draws particular attention to the exquisite device in the porch of filling in the back of the struts which support the architrave beneath the dome with foliated tracery. To the N. the Dariba passes the Dufferin Hospital on the right, and leads to the Chandni Chauk. The portion of that famous street between this point and the Fort was called the Urdu, or Camp. On the N. side of it is a large residence, occupied by the Delhi Bank; this formerly belonged to the Begam Samru, and here Mr Beresford, the manager of the bank, desperately defended himself and his family on 11th May 1857. W. of the Dariba came the Flower Market and the Jewellers' Market in the main street, and then the Chandni Chauk proper, which has swallowed up all the other names. Houses were built both across it and down it during the last years of Mughal rule; they were all

¹ *Indian Architecture*, 2, 66.

removed early last century, and the branch of the W. Jumna Canal running down was closed over after the Mutiny. Opposite a fountain and the S.E. gate of the Queen's Gardens is the Kotwali, where many executions took place after September 1857, and on the W. side of the open space in front of it is the Sonehri Masjid of Roshan-ud-daula, on the platform of which Nadir Shah sat in stony silence while the inhabitants of Delhi were being massacred by his troops. On the left-hand side of the Kotwali is the Sisganj Gurdwara, a sacred place of the Sikhs, erected to mark the traditional site of the martyrdom of their guru Tegh Bahadur, by order of Aurangzeb. Further down, on the same side of the Chandni Chauk, is the *Khuni Darwaza*, or Gate of Blood, where the massacre by Nadir Shah is said to have terminated. Opposite the Kotwali, in the centre of the square in front of the famous *Karawan Sarai*, built by *Jahanara Begam*, daughter of the Emperor Shah Jahan, and held by Bernier to be one of the wonders of Delhi, rises the Northbrook Clock Tower; while on the N. side of the street, between it and the Municipal Buildings, is the Statue of *Queen-Victoria*, presented to his fellow-citizens by Mr James Skinner, grandson of the famous Colonel Skinner, C.B., as a memorial of her late Majesty. Behind the Municipal Buildings are the Begam or Queen's Gardens, much frequented both by travellers by the railway and by townspeople. In the gardens is situated the new Public Library, erected in memory of the Viceroyalty of Lord Hardinge. The Chandni Chauk proper ends at the *Fatehpuri Mosque* constructed by the Begam of Shah Jahan in 1650; it is built of red sandstone, and is surmounted by a single dome. On the S. side of the mosque a street leads to the Lal Kua Bazar, and on the N. side another leads to the Lahore Gate

and the smaller Sarhandi Mosque, erected by another wife of the Emperor, in front of it. Beyond the channel which formerly connected the Western Jumna Canal with the Agra Canal at Okhla (but has now been abandoned), are the quarters of *Paharipur* and *Kishangan* (p. 254). To the S., on the crest of the Ridge, is the *Idgah*, seen so clearly from the Mutiny monument; and to the S.W., at the foot of the Ridge, is the picturesque enclosure of the *Kadam Sharif*, or Sacred Foot, in which Prince Fateh Khan, eldest son of the Emperor Firoz Shah, was buried in 1373. The name is derived from the imprint of the feet of the Prophet Muhammad on a small slab preserved at the tomb. The road running from the front of the *Fatehpuri Masjid* past the W. end of the Queen's Gardens and the Cambridge Mission Church leads to the main road coming past the N. side of the gardens to the Kabul Gate. On the left side of the road, in a large house which once belonged to Nawab Saifdar Jang, the *Cambridge Mission* is located. Besides the College and School under this mission, there is a large female Hospital at *Tis Hazari*, below the S. point of the Ridge. The lady workers of the Mission and the members of the Baptist Mission reside in the Civil Station. Farther on, just before arriving at the site of the *Kabul Gate*, now removed, a piece of the old wall (the main portion of which has been demolished to make room for the new Burn Bastion road) has been left to mark the spot where *Brigadier-General Nicholson* was mortally wounded in pushing towards the Lahore Gate on 14th September 1857.

(2) Tract lying N. of the City.

The Dufferin Bridge, crossing the railway from the above road, leads to the Mori Gate and the

207

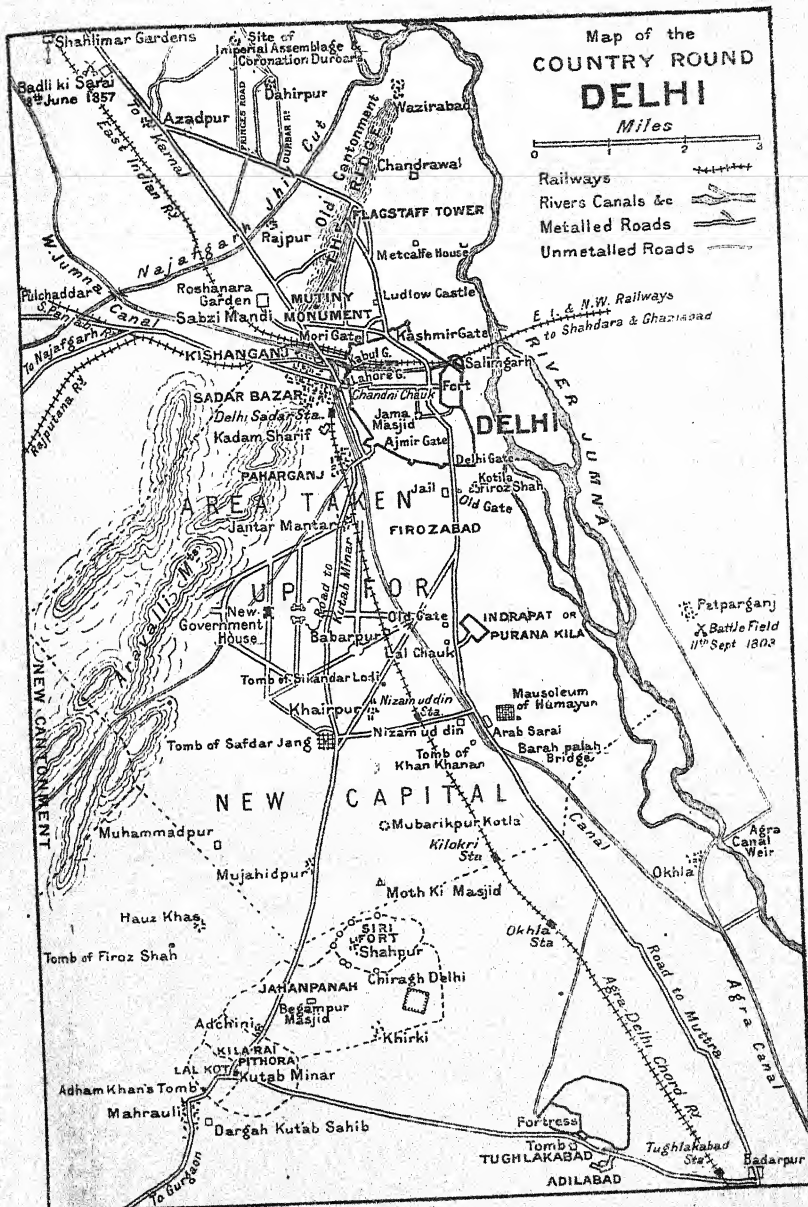
A horizontal number line with arrows at both ends. Three points are marked with vertical tick marks and labeled below the line: 0 at the left end, 1 in the middle, and 2 at the right end.



Rivers Canals &c

Metalled Roads

Metallized Roads



Civil Station. The Mori or Shah Bastion, 200 yards to the W. of the gate, affords a fine view of the S. end of the Ridge and of the N. wall front down to the Kashmir Gate. The present walls of Delhi were constructed by the British after the attack of the city by Jaswant Rao Holkar in October 1805. The repulse of 70,000 Mahrattas, with 130 guns, by Colonel Burn, with two and a half battalions of sepoys and two corps of irregular cavalry, was a most notable feat of arms, though now forgotten, like the Battle of Delhi in 1803 (p. 252). On the right, just outside the Kashmir Gate, is the Kudsia Garden, and on the left the Nicholson Garden, with the lately-erected statue of General Nicholson by Sir T. Brock, R.A. He is buried in the cemetery N. of it. The grave is 50 yds. to the right of the entrance, and bears the brief, soldierly inscription—

The Grave of
Brigadier-General JOHN NICHOLSON,
Who led the assault of Delhi, but fell
In the hour of victory
Mortally wounded,
And died 23rd of September 1857,
Aged 35 years.

To the left of the path leading straight from the gate is the grave of Mr Hervey Greathed, Political Officer with the Force before Delhi, who died of cholera four days after the assault. Just beyond the back (W.) wall of the cemetery is the right section of No. 2 Siege Battery. Passing, in the Kudsia Garden, the Flagstaff which bore the Royal Standard at the Coronation Darbar of 1st January 1903, the site of No. 3 Battery will be found to the S. of the mosque there, which formed part of the old Kudsia Palace, a fine building, which apparently disappeared early in the 19th century, and the Mortar Battery to the left of the N. entrance of the Gardens from the Alipur Road. Just be-

yond this, on the opposite side, is Ludlow Castle, the residence of Mr Simon Fraser in 1857, and now the Delhi Club, with the left section of No. 2 Battery in the grounds close to the wall of the main road. Passing the offices of the W. Jumna Canal and Maiden's Hotel, the present residence of the Commissioner will be seen on the left hand, temporarily occupied by the Commander-in-Chief. Close behind was the **Telegraph Office** in 1857, of which the staff remained on the spot till late in the afternoon of 11th May, and of which one member returned still later with an officer to send an official message to Ambala. It was the irresponsible talk of the office clerks along the line which really conveyed the news of the mutinies of Meerut and Delhi to Ambala, and so to Lahore, and enabled steps to be taken to check worse mischief in the Panjab. A quarter of a mile farther on, across a small drainage ravine from the Ridge, is a high mound, on the crest of which defensive works are still discernible. This was the **Mound Picket**, and **Metcalf House**, which formed the extreme left of our position before Delhi, lies 500 yds. E. of it, on the bank of the Jumna. The house, built by Sir T. Metcalfe between 1830 and 1840, was destroyed at the Mutiny. Its ruins were acquired by Government in 1911, and, after restoration, the house has been fitted up for the winter accommodation of members of the Imperial Legislative Council. The road now proceeds N. for $\frac{3}{4}$ m., and then turns W. through the Ridge, the Northernmost outlier of the Aravallis, the Ridge Road to the left leading past the grave of some of the officers of the 54th, murdered on 11th May 1857, to the **Flagstaff Tower**, to which another steeper road leads direct from the S. From the Tower a complete view is obtained of the whole position before Delhi and of the encampment of the British Force below the Ridge, the

pale dome of St James' Church marking the site of the Kashmir Gate, and the square roof of a factory that of the Mori Bastion. The large house to the W. from the Flagstaff Tower is the Circuit House, built for the Viceroy at the Coronation Darbar, and now occupied as the winter residence of the Viceroy. A pleasant walk may be taken through the old Cantonment, in which the lines of a native cavalry regiment and residences for the officers were built not long ago, and which the Najafgarh Canal bounds on the farther side. The area on both sides of the canal (in reality a drainage cut) was used for the main Civil Camps at the last Imperial Darbar, and is now occupied during the cold season by the tents of the establishments of the Government of India and of the cold-weather garrison. Near the drainage cut is the **Rajpur Cemetery** where Major-General H. Barnard and so many of his brave men who fell before Delhi lie buried.¹ There is a memorial cross of grey Aberdeen granite. Beyond the canal was a battery, erected to protect the rear of our position. Four m. farther down the road is the field of the Battle of Badli-ki-sarai, fought on 8th June 1857 (p. 254). A mile to the W. of the old Mughal Sarai, of which only the two main gateways now remain, are the ruins of the glorious Shahmar Gardens of the Emperor Shah Jahan, the scene of the coronation of his usurping son, Aurangzeb. Half-way to Badli-ki-sarai, and removed some 2 m. to the N. side of the road, is the Plain of Barwari, on which the Imperial Assemblage of 1st January 1877 and the Coronation Darbar of 1st January 1903 were held, and presented

scenes of splendour such as were never seen under the greatest of the Mughal Emperors. His Majesty's Coronation Darbar of 12th December 1911 was also held here. The earthwork of the amphitheatre erected for this purpose has been maintained, and the site of the thrones occupied by their Imperial Majesties marked by a granite column.

Returning to the Flagstaff Tower, in which the ladies and children of the Cantonment were gathered all the long afternoon of 11th May 1857, and looked in vain for the troops from Meerut, and proceeding S. down the Ridge, the old mosque of the time of Firoz Shah, known as the **Chauburji Mosque**, is reached in half a mile. This formed the left of the British position on the Ridge, and round it traces of the breastworks may still be seen. The dark building that rises $\frac{1}{2}$ m. farther S. is the so-called **Observatory**, most probably a portion of Firoz Shah's **Shikargarh**, or hunting-lodge, known generally as the **Fir Ghaib**; to the E. of it the earthworks of a battery are still visible, and just beyond it is **Hindu Rao's House**, the key of the position on the Ridge which was so gallantly held by Major Reid (afterwards Sir Charles Reid, G.C.B.) with his little Gurkhas, supported by the 60th Rifles and the Guides. From the N. side of this, on the edge of the reservoir of the Delhi Waterworks, a fine view is obtained of the slope from the Mori Gate up to the right of our position, to which the mutineers so often advanced. At the bottom of the slope, on the W. side, is a fine "baoli," which no doubt also belonged to the Hunting Palace of Firoz Shah, called **Kushk-i-Shikar**, and **Jahannuma**. At the bottom of the baoli an underground passage of considerable proportions has lately been dis-

¹ This walk can be prolonged by 4 m. by walking N. through the old Cantonment to the end of the Ridge and the picturesque shrine of Shah Alam situated near Wazirabad, on the bank of a nulla spanned by an old Pathan bridge.

covered and cleared out. It leads through the Ridge to the lower ground on the N.W. The key of the passage can be obtained at the Hospital. Within the grounds of the old palace was erected the pillar or Lat of Asoka, 250 yds. S. of Hindu Rao's House. The history of this column is given in the *inscription* on the base of it. Three hundred yards farther S. again rises on a lofty platform the ungainly Mutiny Memorial, occupying the site of the right batteries of our position; on the poor panels round the base of the memorial are records of the troops who served before Delhi, of the various actions fought by them, of our losses, and the names of the officers who fell in them. Behind it, to the W., was the Crow's Nest, over the old flooded quarry, and in front of it, to the S.E., was the Sammy House. It was at this end of the Ridge that Timur entrenched himself after crossing the Jumna in December 1399, and repulsed an attack made on him by the Minister of Mahmud Khan Tughlak. From it a fine view is obtained of the sites of the actual siege, the Sammy House Battery being in full view 400 yds. to the W., and the smashed face of the Mori Bastion 1000 yds. off, while the buildings of the Police Lines and Ludlow Castle and St James' dome indicate the position of the Siege Batteries. The Sammy House, quaintly named from the image of a deity (Swami), in the court of a monastery, was held in order to check the attacks on the right, and round it some of the severest fighting took place; the Sammy House Battery was erected 100 yds. to the N. of it. In the dip of the Ridge which occurs at this point are seen the suburbs of Paharipur and Kishanganj, and farther to the W. that of Sabzi Mandi,¹ through which the enemy so often attacked the British

position, and even their right rear; while full in view, on the Ridge beyond the gap, are the walls of the great Idgah. W. of Sabzi Mandi are the Roshanara Gardens, created by the daughter of Shah Jahan, who lies buried here. She died in 1671—three years before her sister, Jahanara Begam (p. 274). The gardens have lately been cleared and greatly improved.

(3) Tract lying immediately to the S. of the City.

It is more interesting to make the proposed round of this tract by starting on the E. side from the Delhi Gate and returning on the W. side to the Ajmer Gate.

Not far from the Delhi Gate which has lately been islanded to provide for the increase of traffic, were shot the rebel Princes whom Lieutenant Hodson had captured at the tomb of Humayun. About 800 yds. from the gate a fine Pathan gate of decorated stonework is passed on the left: it is known as the Lal Darwaza, or Red Gate, and was apparently the Northern gate of the short-lived capital of Sher Shah, which probably was left incomplete. Immediately after passing the Lal Darwaza, a road leads to the left to the Kotila of Firoz Shah, which formed the citadel of the city of Firozabad, founded by that Emperor. In the Kotila, built up on the top of a lofty platform, rises the second Lat of Asoka, which was brought here from Topra, on the bank of the Jumna in the Ambala District. The pillar is 10 ft. 10 in. round where it leaves the platform, and the total height is 42 ft. 7 in., of which 4 ft. 1 in. are sunk in the masonry. At 10 ft. 1 in. from the base are some Nagri inscriptions, with the date in two of them of Samwat 1581 = 1524 A.D. These must have been inscribed

¹ Vegetable Market.

after the removal of the pillar to Delhi. Above these Nagri inscriptions is the Pali inscription, which contains the edicts of Asoka. This dates from the middle of the 3rd century B.C., and the characters are of the oldest form that has yet been found in India (see *Introd.* p. lxxxi). It is very clearly written, but, when Firoz Shah assembled all the learned of the day to decipher the inscription, they were unable to do so. There is a second inscription, which records the victories of the Chauhan Prince Visaladeva, whose power extended from the Himalaya to the Vindhya. This record consists of two portions—the shorter one immediately above Asoka's edicts, and the longer immediately below them. Both are dated Samwat 1220 = 1163 A.D., and refer to the same Prince. The minor inscriptions are of little interest.

To the S. of the Lat is a Mosque now much ruined, but which must once have been a very fine one; it was surrounded by arcades and by a covered hall borne by plain stone columns like those of the Kalan Masjid in Delhi. To the S. of it again are the large enclosures shut in by the very lofty walls which look so imposing from the Grand Trunk Road. A considerable amount of conservation work has lately been done in connection with this group. The interior courtyards have been cleared of debris and grassed. The circular *baoli*, with two storeys of arches, lately revealed by excavation, is particularly worthy of notice. The ruins of Firozabad were extensively used for the construction of it and of the Delhi of Shah Jahan, and but little remains of that now, though scattered ruins show that its area must have been larger than that of the present city. Two miles to the S., on the site of the old Indrapat, rise the lofty walls of

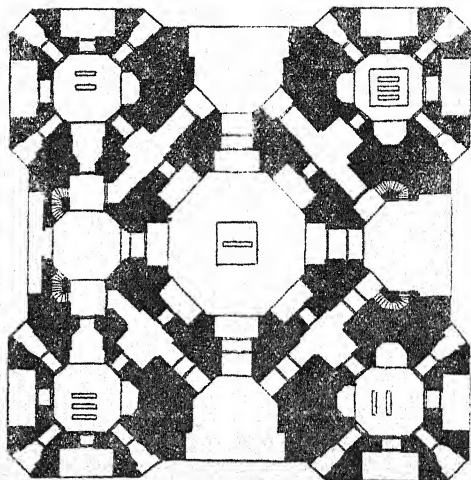
the Purana Kila, built by Sher Shah, or by him and Humayun, with their graceful high gates. The S. gate, by which the Fort is most conveniently entered, is reached by a bridge across an old branch of the Jumna here; opposite the point where the road to it turns back N. are the Khair-ul-manazil, a Madrasa, and mosque built by Maham Anagah, foster-mother of the Emperor Akbar and mother of Adham Khan (p. 280). To the side of this is another gate similar to the Lal Darwaza, which formed the entrance of a large market. It is worth while to ascend the gate of the Purana Kila for the sake of the splendid view to the S. The large and squalid mass of mud huts which formerly filled the whole of the Purana Kila enclosure has been cleared away and the ground levelled and grassed. Paths lead to all the gates and round the fine double cloisters inside the walls. There are an interesting *baoli* of great depth, and some underground baths near it. The road running straight on from the gate leads in 300 yds. to the Mosque of Sher Shah, which is one of the handsomest and most picturesque structures at Delhi; the colour of the red sandstone, the brackets under the balconies, the floral carving round the arches, and the pendentives of the domes of the interior are all worthy of special notice. A little to the S. of the mosque is a red octagonal building, called the Sher Mandal, on the steps of which, on the 24th January 1556, the Emperor Humayun slipped in rising from the evening prayer, and received injuries of which he died three days later.

Two miles farther down the Grand Trunk Road¹ again, at a tomb with a dome of green glaze,

¹ Left of the road will be seen a kos minar pillar or Mughal milestone. The kos of Akbar was 2 m. 1000 yds.

side roads run left and right to the **Mausoleum of Humayun** and the shrine of **Nizam-ud-din Aulia**. The entrance to Humayun's tomb has lately been opened out and improved. The road leads first into a forecourt, on the right of which lies the entrance to the fine octagonal enclosure containing the mosque and tomb of **Isa Khan**, one of the best remains of the later Pathan period. It then enters the

as are the angles of the corner rooms of the mausoleum. Each side is 156 ft. long, and the height to the top of the dome is 125 ft. It stands upon a high platform of red sandstone, and consists of a large central octagon surmounted by a dome with octagon towers of unequal sides at the angles. "Its plan is that afterwards adopted at the Taj, but used here without the depth and poetry of that cele-



Plan of the Tomb of Humayun.

Bu Halima Garden, lately occupied by a squalid village, but now restored to its former purpose. Alighting at the Eastern Gate of the Bu Halima Garden, the visitor passes into a garden forecourt to the Humayun tomb enclosure. On the right of the forecourt is the gateway of the **Arab Sarai**, built by the widow of the Emperor Humayun. Immediately in front is the noble portal of the tomb enclosure. The wings of the gate are sloped backwards at the sides,

brated building. It is, however, a noble tomb, and anywhere else must be considered a wonder" (Fergusson). The red sandstone of the exterior is most artistically picked out in relief with white marble. The windows are recessed, and the lower doors are filled in with beautiful lattices of stone and marble. In the centre of each side of the main octagon is a porch 40 ft. high, with a pointed arch. From the S. porch a door leads to the central octa-

gonal chamber, with a diameter of 48 ft., in which is the cenotaph of the Emperor — it is of white marble, and quite plain, without any inscription. The actual grave chamber can be entered by a long, dark passage in the S. face of the platform. In the N.E. corner above is the tomb of his wife, Haji Begam,¹ and among the tombs in other chambers are believed to be those of Dara Shikoh, two brothers of Bahadur Shah, and the Emperors Jahandar Shah and Alamgir II. Steps lead from the side of the E. and W. bays, first up to a gallery round the upper portion of the central chamber, and then to the terrace round the neck of the great dome. The buildings on the terrace, which once formed a small college, afford a splendid view of the country on all sides. Inside the garden of the mausoleum, which measures 13 acres, is a pretty tomb of red sandstone, with some beautiful grilles; outside, at the S.E. corner, rises the blue dome of the tomb of Fahim Khan, while half a mile away to the S.W. is the huge half-ruined tomb of Khanan Khan. Outside the N.E. corner of the garden, but not visible from here, is an interesting enclosure and mosque, said to have been the abode of Nizam-ud-din Aulia. It was at the mausoleum of Humayun, it will be remembered, that Lieutenant Hodson received the surrender of Bahadur Shah, ex-King of Delhi, and of two of his sons and a grandson, after the capture of the city. The garden of the tomb, and those of Isa Khan and Safdar Jung, are being well restored now. Every one who can should visit the tomb and mosque of Isa Khan, now in satisfactory surroundings, of Khanan Khan (despoiled by a Nawab of Oudh), and the old Barahpala Bridge beyond it.

¹ Her title was Mariam Mukami.

The Dargah, or Shrine of Nizam-ud-din Aulia, stands on the left side of the branch road to the W. On the N. side are the Lal Mahal, or Red Palace, possibly of Ala-ud-din Khilji, and the Barah Khambe, or Twelve Columns; and on the S.E. side, in the village, a fine but ruined mosque, with four arcaded courtyards, similar to that at Khirki (p. 281), and of the date of 1372 A.D. The gateway of the shrine leads directly on to the tank, a special feature at Chishti Dargahs, and in this instance the traditional cause of the quarrel between the Emperor Tughlak Shah and the Saint, who lived to the age of ninety-two, and died in 1324 A.D. The story runs that the Emperor requisitioned the workmen on the tank for labour on his fortress at Tughlakabad, and that when the Saint arranged to carry on his work at night the Emperor forbade the sale of oil to him. Thereupon the water of the tank miraculously served as oil, and was duly cursed by the incensed King, in return for which the Saint cursed Tughlakabad. Be the cause what it may have been, there can be no reasonable doubt that Nizam-ud-din was concerned with Ala-ud-din in the plot against the Emperor; and the saying with which he comforted his disciples when told that the King was returning to punish him, and, indeed, was only a few miles distant—"Dilli hanoz dur ast" ("Delhi is still far off")—has passed into the currency of a proverb. On the right side of the tank are some tombs, and from these and from the enclosure walls men and boys dive into the water. On the left side a covered passage leads to an inner gate, and yet to another, which gives admittance to the court in which the Tomb of the Saint stands. This is built of white marble, and is 18 ft. sq. and surrounded by a broad veranda; it has been restored and altered on many occasions, and

there is very little of the original structure left in it now. Round the covered grave is a low marble rail, and over it is a canopy inlaid with mother-of-pearl; in the walls are fine pierced screens. To the W. of the tomb is a fine red sandstone mosque called the Jamat Khana, with a large central compartment and two side bays, somewhat in the style of the Alai Darwaza; and at the N. end of the enclosure is a R.H. built by the Emperor Aurangzeb. S. of the tomb of the Saint are, from W. to E., the grave enclosures of Jahanara Begam, sister of that Emperor; of Muhammad Shah, Emperor 1719-48; and Prince Jahangir, son of Akbar Shah. The grave of the first is open to the sky, and has grass planted in the hollow in the top of it; the erect gravestone at the head embodies the sentiment of this humble arrangement. This was the lady successfully treated by Mr Gabriel Boughton, who asked as his reward certain trade concessions to the English in Bengal. The other two tombs have elaborately-carved marble doors in the archways in the screens of beautiful pierced marble work which surround them. Beyond the central court is another called the Chabutra Yarani, or Seat of the Friends, where the Saint used to sit with his disciples; the beauty of both these courts is greatly enhanced by the fine trees in them. To the right in this enclosure is the tomb of the famous poet, Amir Khusru, the friend of the Saint, whom he survived for a few days only. In the inscription on the walls he is termed the Tuti-i-shakar makal, or sweet-tongued parrot. The grave chamber is surrounded by two galleries, and only a very subdued light reaches it.

E. of the tank, on a higher level, is the picturesque polychrome tomb, well restored, of Azam Khan—known also as Atgah Khan—who

saved the life of the Emperor Humayun at the Battle of Kanauj, and was a foster-father of the Emperor Akbar. He defeated Bairam Khan when that General rebelled, and was murdered at Agra on 16th May 1562 by Adham Khan (p. 280). 200 yds. farther to the S.E. is the Hall known as the Chausath Khambe, or Sixty-four Pillars, which forms the family vault of the sons and brothers of Azam Khan, who were known as the Atgah Khail, or Gang, from the royal favours which were showered on them. It was built by Aziz Kokaltash, foster-brother of Akbar, who died in 1624 A.D.

About 2 m. from Dargah towards the Tomb of Safdar Jang will be seen a fine domed mausoleum on the left and four similar buildings on the right. The first is that of Mubarak Shah, murdered in 1433. Of those on the N. side of the road, the nearest figured in Fergusson's *Architecture of India* covers the grave of another Saiyad King, Muhammad Shah; the next is the fine gateway to a mosque beautifully decorated with plaster, and the most splendid specimen of this work in all India; the third is a nameless tomb, and the fourth, N. of the village and close to a fine stone bridge, is the mausoleum of Sikandar Lodi (1489-1517), built in the middle of a fine fortified enclosure. No one who can by any means make an hour available should fail to visit these Northern buildings.

Half a mile to the W., and facing the end of the road, is the mausoleum of Nawab Safdar Jang (died 1754), by which title Mansur Ali Khan, the second Prince of Oudh and first Nawab Vazir, was known. The large garden enclosure is entered by a fine gateway, to the N. of which is a mosque opening to the outside of the garden. The tomb stands on a high platform at the end of a paved walk, once with water down the

centre of it, as at the Taj. It is 90 ft. square, and is arranged in three storeys; some of the fawn-coloured stonework on it is very effective, but the marble decoration inlaid on the corner red towers greatly spoils the general effect. In the central chamber is the carved tomb of Safdar Jang, and in the chamber below are two earthen graves. The plaster decoration of this chamber and the rooms round it is perhaps the weakest feature of the building. The view from the top of the roof is very fine. The garden, which was once much neglected, has been improved of late years. The road to the N. of the tomb, which connects it with the Paharganj suburb of Delhi city, runs directly through the centre of the area in which the new capital of Delhi is under construction. 3 m. to the N., on the road to Delhi, is a ruined Observatory, erected, like those at Ujjain, Jaipur, and Benares, by Maharaja Jai Singh of Jaipur about 1725 A.D. (see *Jaipur Observatory*, p. 193). The largest of the buildings is an immense equatorial dial, named by the Raja the Samrat Yantra, or "Prince of Dials," the dimensions of the gnomon being as follows:—

	ft.	in.
Length of hypotenuse .	118	5
" base .	104	0
" perpendicular	56	7

To the S. of the gnomon are two circular structures, with niches in the walls to enable the ascension and declension of the stars to be marked on them. 2 m. N. of the Observatory is the Ajmer Gate of the city.

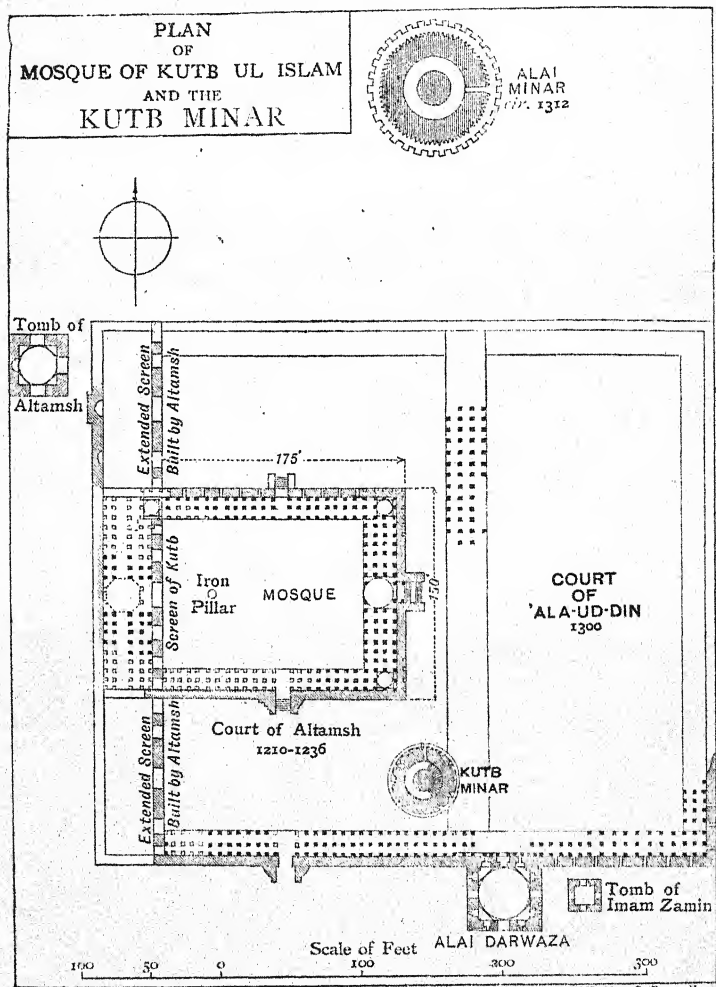
- (4) The Extreme S. of the Surroundings of Delhi, including the Kutb (11 m. from Delhi) and Tughlakabad (5 m. from the Kutb).

Immediately S. of the tomb of Safdar Jang is the field of battle

upon which Timur utterly defeated Muhammad Shah Tughlak and his Minister on 12th December 1398, and became master of Old Delhi. A mile farther S., on the left side of the road, is seen the dark wall of the Idgah, where Timur encamped the day after the battle. E. of this rise the walls of Siri, and to the S. of them a lofty platform known as the Badi Mandal, and the Begampur Mosque with its many domes. This mosque has an extremely fine court, and was built by the Wazir Jahan Khan in the reign of the Emperor Firoz Shah; it is now occupied by a village in which some Europeans were concealed in 1857. A little farther on, and about $1\frac{1}{4}$ m. to the W. of the road, a gleaming dome rising above trees indicates the Mausoleum of the Emperor Firoz Shah, who died in 1389. It is built on the S.E. corner of **Hauz Khas**, constructed by 'Ala-un-din Khilji, and is well deserving of a visit on account of its picturesque situation. A path has lately been made from the Kutb road which runs directly to this group of buildings, on which much conservation has lately been done. It was here that Timur first rested after his victory. At the 9th milestone from Delhi the road passes through the **Jahanpanah** defences, which were constructed to connect Siri, the new city of 'Ala-ud-din, with the older Delhi to the S. of it. The wall of this, originally the **Fort of Rai Pithora** is crossed at the 10th m., whence the Northern wall of the citadel of **Lal Kot** is well seen. The remains of the walls of the citadel of Rai Pithora have been marked out by beacons. In the middle of the E. side of the Lal Kot is the Kutb enclosure, and on the S. wall is the tomb of Adham Khan (p. 280). Rai Pithora is the local name of the Prithvi Raja, the gallant Chauhan Prince of Ajmer, grandson of both Anang Pal II. Tomar and his conqueror Bisal Deo, Chauhan.

who checked Shahab-ud-din Ghori near Thanesar in 1191, but was defeated and put to death the

will be readily understood from the accompanying plan. The original Kuwwat ul Islam Mosque was



next year, the fortress falling in 1193.

The arrangement of the buildings of the Kutb Minar Enclosure

begun by Kutb-ud-din Aibak when Viceroy of Shahab-ud-din Ghori, after the capture of Delhi in 1193 A.D., as recorded by the

King himself in the long inscription over the inner archway of the E. entrance. Even in ruins it is a magnificent work. It was seen by Ibn Batuta about 150 years after its erection, when he describes it as having no equal, either in beauty or extent, and was extolled by the poet Amir Khusru, who specially mentions the extension of 'Ala-ud-din. It is not so large as the great mosques of Jaunpur and others, but is still unrivalled for its grand line of gigantic arches, and for the graceful beauty of the flowered tracery which covers its walls. It occupies the platform on which stood Rai Pithora's Hindu Temple, demolished by the Muhammadans. Altamsh in 1210-30 surrounded it by a larger cloistered court, in the S.E. corner of which stands the Kutb Minar, and extended the great screen of arches N. and S. across the extensions on these sides; and in 1300 'Ala-ud-din appended a further Eastern court, entered by his great S. gateway, the Alai Darwaza, and designed a great addition, with a further extension of the screen on the N. side in which the Alai Minar was to correspond to the Kutb Minar; ruined piers of these still remain on the W. and N. sides. The main entrance to the original mosque is an arched gateway in the centre of its E. wall. Steps ascending under this lead to the courtyard (942 ft. by 108 ft.), which is surrounded by cloisters formed of Jain pillars placed one upon another. Most of these are richly ornamented; many of the figures have been defaced by the Muhammadans, though some may still be found in unnoticed corners. The Arabian inscription over the E. gate states that the materials were obtained from the demolition of twenty-seven idolatrous temples, each of which had cost twenty-seven lakhs of dilials, fifty dilials being equal to one rupee. The domed pavilions in

the angles of the cloisters are worthy of notice.

The famous Iron Pillar (see lower down) stands in front of the central opening to the mosque proper—a building of small proportions, and now in ruins, overtopped and hidden by the grand screen of lofty arches which occupies the whole of the W. side. This screen was erected by Kutb-ud-din later than his other work, and was extended beyond on either side for 115 ft. by Altamsh. The central arch is 53 ft. high by 22 ft. wide. "The Muhammadan conquerors had a tolerably distinct idea that pointed arches were the true form of architectural openings, but, being without science sufficient to construct them, they left the Hindu architects and builders to follow their own devices as to the mode of carrying out the form. Accordingly, they proceeded to make the pointed openings on the same principle upon which they built their domes—they carried them up in horizontal courses as far as they could, and then closed them by long slabs meeting at the top." The ornamentation, interspersed with texts from the Koran, is evidently taken from that on the old pillars of the cloister. Fragments of the roof of the mosque still remain; supported by old columns, and do not reach more than one-third of the height of the screen in front of it. When Delhi was captured by Timur the Mughals massacred all the persons who had taken refuge in the mosque.

The Iron Pillar is one of the most curious antiquities in India. It is a solid shaft of wrought iron, more than 16 in. in diameter and 23 ft. 8 in. in length. The height of the pillar above ground is 22 ft., but the smooth shaft is only 15 ft., the capital being $3\frac{1}{2}$ ft. and the rough part below also $3\frac{1}{2}$ ft.

"The Iron Pillar records its own history in a well-executed

Gupta inscription of six lines of Sanskrit poetry. It was first studied by James Prinsep (*B.A.S. Journal*, 7, 630), and has been finally edited by Dr J. F. Fleet (*Gupta Inscriptions, Corpus Inscriptionum Indicarum*, vol. 3). It contains the posthumous eulogy of a king of the name of Chandra, who is said to have conquered the Vanga Country (*i.e.*, Bengal), and, after having crossed the seven tributaries of the River Indus, to have vanquished the Váhlíkas. In his memory the 'standard of the Lord Vishnu' was set up on the mountain called Vishnupada, 'the footprint of Vishnu.' From this it may be surmised that the Iron Pillar bore originally the effigy of the sun-bird Garuda, and stood in front of a Vishnu temple. It is also evident that the pillar does not now stand in its original position, as the locality cannot possibly be defined as "a mountain." As the Gupta characters of the inscription belong to the Eastern variety, it is most likely that the pillar was brought to Delhi from Bihár, the ancient country of Magadha, which formed the nucleus of the Gupta empire. The King Chandra mentioned in the inscription is probably the Gupta Emperor Chandra-gupta Vikramáditya, who reigned about 400 A.D. The name of Anang Pál also is inscribed on the shaft with the date Samvat 1109=1052 A.D. According to tradition, it was Anang Pál, the founder of the Tomar dynasty, who erected the pillar. It rested on the head of a great snake until the Raja unwisely moved it to see if this were so—an act which cost the Tomars their kingdom. This tradition perhaps preserves a reminiscence of the removal of the pillar to Delhi by Anang Pál. Four feet above the inscription is a deep indentation, said to have been made by a cannon-ball fired by the troops of the Bharatpur Raja. Tablets with the Sanskrit text of

the inscription, together with translations in English, Hindi, and Urdu, will be found in the northern cloister of the mosque; they were erected by Pandit Banke Rai of Delhi.

Sir Robert Hadfield, F.R.S., to whom chippings of the Iron Pillar were sent for analysis by the Director-General of Archaeology, arrived at the following results:—

Carbon . . .	0.080 per cent.
Silicon . . .	0.046 "
Sulphur . . .	0.006 "
Phosphorus . . .	0.114 "
Manganese . . .	nil "
<hr/>	
Total elements other than iron . . .	0.246 per cent.
Iron . . .	99.720 "
<hr/>	
Total . . .	99.966 per cent.

Specific gravity, 7.81 per cent. Ball hardness, No. 188.

"It will be noticed that the material is an excellent type of wrought iron, the sulphur being particularly low (0.006 per cent.), indicating that the fuel used in its manufacture and treatment must have been very pure (probably charcoal). The phosphorus is 0.114 per cent. There is no manganese present—a somewhat special point, as wrought iron usually contains manganese. The iron was ascertained by actual analysis, and not 'by difference.'"

The Kutb Minar is a grand monument, and looks what it is intended to be—a tower of victory. It has been a question whether it was not originally Hindu, altered and completed by the Muhammadan conquerors, but the conclusion of General Cunningham—that it is a purely Muhammadan structure—seems to be the right one.¹ The lowest storey bears the name of Muhammad bin Sam (Shahabuddin), and of Kutb-ud-din Aibak, and the

¹ For particulars regarding the discussion, see *Archaeol. Rep.*, 1, 190.

next three storeys contain that of Altamsh. At the entrance door is an inscription of Sikandar Lodi, with the date 1503. As seen at present, it is 238 ft. high, and rises in a succession of five storeys, marked by corbelled balconies and decorated with bands of inscription. The base diameter is 47 ft. 3 in., and that of the top about 9 ft. The three first storeys are of red sandstone with semi-circular and angular flutings; the two upper storeys are faced chiefly with white marble, and were almost entirely rebuilt by Firoz Shah Tughlak in 1368, when he also added a cupola. On 1st August 1803 the whole pillar was seriously injured by an earthquake and the cupola thrown down. It was injudiciously restored in 1829, the battlements of the balconies being removed and replaced by the present flimsy balustrades. Notice should be taken of the honeycomb work beneath the brackets of the first-storey balconies, of which the "structure differs in no perceptible degree from that in the Alhambra." The lowest great band of text inscription is extremely beautiful, and is well seen from the top of the cloister of the mosque, or of the Alai Gate. A magnificent view is obtained from the summit, reached by 379 steps; but that from the first gallery, 95 ft. above the ground, is nearly as fine.

The Tomb of Altamsh (who died in 1235 A.D.) stands outside the N.W. corner of his extension of the mosque. It is of red sandstone. The main entrance is to the E., but there are also openings to the N. and S. The interior is almost completely covered with beautiful decoration, and is inscribed with finely-written passages of the Koran; in the centre of the W. side is a Kibla of white marble discoloured with age. The tomb is in the centre, and stands on a

high base; that the actual tomb is a cenotaph is proved by the recent discovery of a chamber beneath it (now approached by a narrow flight of stairs) which apparently contains the real grave. General Cunningham notes that though there is no roof, "there is good reason to believe that it was originally covered by an overlapping Hindu dome. A single stone of one of the overlapping circles, with Arabic letters on it, still remains." Mr Fergusson points out: "In addition to the beauty of its details, it is interesting as being the oldest tomb known to exist in India" (*Ind. Arch.*, 2, 209).

The Alai Darwaza, 40 ft. to the S.E. from the Kutb Minar, is the S. entrance of the great or outer enclosure to the mosque. It was built of red sandstone richly ornamented with patterns in low relief, in 1310 A.D., by 'Ala-ud-din. Over three of the entrances are Arabic inscriptions, which give 'Ala-ud-din's name and his well-known title of Sikandar Sani, the Second Alexander, with the date 710 A.H. The building is a square with lofty doorways, with pointed horse-shoe arches on three sides and a rounded arch curiously decorated on the inner side. In each corner there are two windows, closed by massive screens of marble lattice-work. The gate stands high above the ground to the S. of it, and should be viewed from that side. A considerable area of ground lying between the Kutb enclosure and the walls of the "Metcalf Estate" has recently been acquired, in order to allow the visitor to see the Alai Darwaza from the S. A few yards to the E. stands the richly-carved building in which is the tomb of **Imam Zamin**. He came to Delhi in the reign of Sikandar Lodi, and died in 944 A.H.=1537 A.D. The tomb is a small domed building, about 18 ft. square, of red sandstone, covered with chunam.

There is an inscription in the Tughra character over the door.

The Alai Minar stands 150 ft. N. of the original Kutb enclosure. The inner tower and outer wall are of very coarse work, of large rough stones; the flutings in the exterior show the shape which the Minar would have assumed when lined with red sandstone. The total height as it now stands is 70 ft. above the plinth, or 87 ft. above the ground level. Had this pillar been finished it would have been about 500 ft. high. In the S.W. corner of the *outer* enclosure, corresponding with the tomb of Altamsh, are a group of ruined buildings. That on the S. side is believed to have been the tomb of 'Ala-ud-din, and the grave in the centre room, lately brought to light in the course of excavation, is said to be his: the buildings on the right are known as Ala-ud-din's College. Considerable conservation work has lately been carried out in connection with the Kutb group of buildings. The old road running through the group has been diverted, lawns planted, and an attempt made by carefully designed shrubberies to indicate the site of the extensive colonnades.

To the S.E. of the Kutb Minar is a tomb of a brother of Adham Khan, once used as a country house by Sir T. Metcalfe, and 500 yds. beyond it is a fine mosque of the latest Pathan style, known as the Jamali Mosque. At the N.E. corner of it, in a separate enclosure, is the pretty tomb of Shekh Fazl-ullah, decorated with bright tiles. 200 yds. due E. of the mosque, in the midst of mounds of ruins, are the broken massive walls of the Tomb of the Emperor Balban (1287 A.D.), which formed a Dar-ul-Aman, or House of Refuge, in his lifetime.

To the W. of the Kutb enclosure, which is bounded by the road from Delhi to Mahrauli, a paved way leads to a well-known Hindu

temple called the Jog Maya. 200 yds. farther S. the tomb of Adham Khan rises high on the S. wall of Lal Kot. Adham Khan, who was half-brother as well as foster-brother of Akbar, murdered Azam Khan, whose wife was also foster-mother to the Emperor, in the palace of Agra, and was thrown down from the terrace there by the Emperor, who himself felled him with a blow of the fist as he issued from his private apartments. Adham Khan had previously distinguished himself by driving the mistress of the last King of Malwa to suicide upon capturing Mandu, while his mother, not to be outdone, put to death two of that Prince's daughters for fear that they might complain to the Emperor. She is said to have died of a broken heart a few days after her son, and to have been buried here too. The tomb is entirely constructed of materials taken from some Pathan tomb of the middle period.

A short distance to the S.E. of the tomb, across the road, is a large round well, into which also men and boys dive. Not far from this is the northern entrance of the Dargah, or shrine, of Kutb-ud-din Bakhtiar Kaki; the inner gateway and the ruined music-gallery gate on the right of the approach date from the time of Salim Shah. Close to a third gateway is the grave enclosure of the Nawabs of Jhajjar, the last of whom was hung in 1857. In the main courtyard, which is but small, are a mosque and the tomb of Muhammad Khan; on the right, and standing back from them, is a gate to another court and the main W. approach to the shrine. S. of this western court is an enclosure with a pretty but feeble Moti Masjid of white marble, built by Bahadur Shah, eldest son of Aurangzeb, in 1709, and beyond it, in a separate court, are the simple graves of the Kings of Delhi Akbar Shah II.

(died 1837), of the blind Shah Alam (died 1806), and of the Emperor Bahadur Shah (died 1712). The space between the last two was to have been the resting-place of the last King of Delhi, who died at Rangoon in 1862. From the Eastern courtyard a passage, paved and lined with marble, and with a fine pierced marble screen on the right hand, leads past the Grave of the Saint, which stands in the open, protected by an awning above it; on the back wall of this enclosure, which may be entered only with uncovered feet, is some fine work of glazed tiles dating from the time of Aurangzeb. The Saint, who was born at Ush, in Turkestan, and perhaps came to Delhi before the Muhammadan conquest, died during the reign of Altamsh in 1235 A.D.: his name, Kaki, is derived from the alleged miracle of his having been fed by heavenly food—*kák*=cake. Outside the innermost shrine is the mosque where the Saint used to pray, and beyond it is a picturesque baoli tank, now dry. At the W. end of this is the grave of Zabita Khan, and another said to be that of Ghulam Kadir Khan, who thus, if the grave be really his, rests near his unhappy victim Shah Alam. To the S. of these is a small court with the graves of the family of the Nawab of Loharu.

Outside the W. gate are a fine gateway known as the Mahal Sarai, and beyond it a pretty mosque standing on a high platform built by Ahsanullah Khan, physician of the last King of Delhi. Turning S. from here for 400 yds. along the main picturesque street of Mahrauli, the Shamsi Hauz, the great tank of Shams-ud-din Altamsh, will be reached on the right. It was constructed by that Emperor, and has a ruined pavilion in the centre like the Hauz Khas of 'Ala-ud-din, and must have been very picturesque when full of water. On the E. bank is

an interesting building of red sandstone called the Jaház, or Ship, and beyond it the Aulia Masjid, where, according to tradition, thanks were offered up on the capture of Delhi in 1191. On the opposite side of the road here is the picturesque Jhirna (Spring) garden, through which the water of the tank descended and found its way past the tomb of Balban to Tughlakabad. The walk down the depression to the tomb is exceedingly pretty.

The Fort of Tughlakabad lies 5 m. to the E. of the Kutb. The road to Tughlakabad will be found to the left immediately on leaving the Kutb enclosure, and passes through the Eastern wall of Kila Rai Pithora, a mile farther on. The N.E. portion of this wall runs $1\frac{1}{2}$ m. up to Khirki, where there is a most interesting covered mosque with four open courts, each 32 ft. sq., built by Jahan Khan in 1380; it must be visited on foot, but is well worth a visit. Adjoining the mosque on the E. is a fine sluice of seven bays, apparently of the same date as the mosque and $\frac{1}{2}$ m. N.E. again is the Dargah of Chiragh Delhi, the last great Delhi Saint, who died in 1356, and the Tomb of Bahlol Lodi (died 1488). Long before it is reached the great Fort of Tughlak Shah is seen rising high above the plain to the left of the road. General Cunningham writes that "it may be described with tolerable accuracy as a half-hexagon in shape, with three faces of rather more than $\frac{3}{4}$ m. in length, and a base of $1\frac{1}{2}$ m., the whole circuit being only 1 furlong less than 4 m. It stands on a rocky height, and is built of massive blocks of stone, so large and heavy that they must have been quarried on the spot. The largest measured was 14 ft. in length by 2 ft. 2 in., and 1 ft. thick, and weighed rather more than 6 tons. The short faces to the W., N., and E. are protected

by a deep ditch, and the long face to the S. by a large sheet of water, dry, except in the rainy season, which is held up by an embankment at the S.E. corner. On this side the rock is scarped, and above it the main walls rise to a mean height of 40 ft., with a parapet of 7 ft., behind which rises another wall of 15 ft., the whole height above the low ground being upwards of 90 ft." It had thirteen gates, and there are three inner gates to the citadel.

Opposite the causeway to the tomb a gateway with a Hindu arch leads into the fort at the point where the largest of the tanks in it was excavated. Beyond this, to the N.W. and N., are ruins of the palace and a mosque, and high above it, in the S.W. angle, is the citadel, which occupies about one-sixth of the area. It contains the ruins of an extensive palace, surmounted by an inner citadel, from which there is a splendid view. The ramparts are raised on a line of domed rooms, which rarely communicate with each other, and which formed the quarters of the garrison. One dark passage near the S.E. corner, below the inner citadel, leads to a small sally-port in the outer wall. The walls slope inwards, and the vast size, strength, and visible solidity of the whole give to Tughlakabad an air of stern and massive grandeur that is both striking and impressive.

* In the N. part of the fort below are the ruined walls of a Jami Masjid. The curse of the Nizam-ud-din Aulia upon Tughlakabad was—

"Ya base Gujar
Ya rahe ujar"

("May it be inhabited by Gujars
or may it remain desolate"),

and while it is impressively desolate now, it also contains small Gujar colonies in the midst of its desolation.

The fine *Tomb of Tughlak Shah* is outside the S. wall of Tughlakabad, in the midst of an artificial lake, and surrounded by a pentagonal outwork, which is connected with the fort by a causeway 600 ft. long, supported on twenty-seven arches. Mr Fergusson says (*Ind. Arch.*, 2, 215): "The sloping walls and almost Egyptian solidity of this mausoleum, combined with the bold and massive tower of the fortifications that surround it, form a model of a warrior's tomb hardly to be rivalled anywhere, and in singular contrast with the elegant and luxuriant garden-tombs of the more settled and peaceful dynasties that succeeded." The outer walls have a slope of 2.333 in. per foot; at base they are 11½ ft. thick, and at top 4 ft. The exterior decoration of the tomb itself depends chiefly on difference of colour, which is effected by the use of bands and borders of white marble inserted in the red sandstone. In plan it is a square, and three of its four sides have lofty archways, the space above the doorway being filled with a white marble lattice screen of bold pattern. It is surmounted by a white marble dome. In the S.W. corner of the enclosure is a small domed chamber with a number of graves.

"Inside the mausoleum there are three cenotaphs, which are said to be those of Tughlak Shah, his Queen, and their son Juna Khan, who took the name of Muhammad when he ascended the throne." This King was, and is still, known as the Khuni Sultan, "the bloody King." Firoz Shah, his successor, bought acquaintances from all those he had wronged, and put them in a chest at the head of his tomb, that he might present them when called to judgment.

Opposite the S.W. corner of Tughlakabad a fine embankment which held up the waters of the lake connects Adilabad with it;

there is a sluice between it and the rocky ground at the N. end. Adilabad is said to have been built by Muhammad Tughlak; there is a fine gate in the Hindu style in the W. face, and a magnificent view from the top of the mausoleum and fort and the Kutb Minar. A little farther to the E. is an isolated fortified residence called the Nai's (Barber's) Fort, which seems to have been a college or the residence of some saint. $2\frac{1}{2}$ m. farther on, and 8 m. from the Kutb, is Badarpur, on the Grand Trunk Road and railway from Delhi to Muttra. Tilpat lies 4 m. S.W. of Badarpur. From this place it is 7 m. to the mausoleum of Humayun and shrine of Nizam-ud-din.

it twice, and passing through Ghaziabad, Meerut, and Saharanpur, 162 m. in 6 to 8 hrs.; fares, Rs.15, Rs.7 $\frac{1}{2}$, Rs.2.

(1)

Leaving the central station at Delhi, the railway proceeds over a level plain to

9 m. Bādli. Before reaching this station the ruins of the Shalimar gardens (p. 269) are seen on the left, and the battlefield of Badli-ki-sarai (pp. 254 and 269) on the right. From here the tract irrigated by the W. Jumna Canal is entered.

27 m. Sonapat, an ancient place, and with Panipat (see below), Baghpat (lying E. on the Jumna), Indrapat (p. 271), and Tilpat (see left column), one of the five estates or pats over which the traditional conflict of the *Mahabharata* took place about 1000 B.C. (p. lxxii. *Introd.*).

55 m. Panipat station (D.B.) (population 26,342). The modern town stands near the old bank of the Jumna, upon a high mound consisting of the debris of earlier buildings. In the centre the streets are well paved, but the outskirts are low and squalid. There are the usual civil offices. There are a large civil R.H. and a small P.W.D. bungalow, where travellers can stay after obtaining permission from the Deputy-Commissioner, but they have to make their own arrangements for food.

The principal building of antiquity is the shrine of Kalandar, a celebrated local saint. The legends about him show that he directed the Jumna to move back seven paces, as he had become stiff standing in the water, but in her hurry to obey she moved back seven miles. He gave a charm to the Panipat people which dispelled

ROUTE 15.

- (a) DELHI to KASAULI (171 m.) and Simla (219 m.) by Panipat, Thanesar, Ambala, and Kalka (162 m.).
- (b) DELHI to LAHORE by Ghaziabad Junction, Meerut, Sardhana, Saharanpur, Ambala, Sirhind, Ludhiana, Jullundur, Amritsar, and Lahore Cantonment (349 m.).

There are two railway routes from Delhi to Ambala, and to farther N., viz. :—

(1) The direct E.I. Railway line on the W. bank of the Jumna, through Panipat and Karnal, 123 m., in 4 to 6 hrs.; fares, Rs.10, Rs.5, R.1 12 annas.

(2) The N.W. Railway line on the E. bank of the river, crossing

all the flies, but they grumbled at this, so he brought them back a thousandfold. His body is said to have been buried in three places—namely, at Karnal, Budha Khara, and Panipat.

Panipat is famous as the place where three of the most decisive battles in India have been fought; but the silent plain tells no tales, and shows scarcely any sign of the events that have happened on it.

Here, on the 21st April 1526, Babar encountered Ibrahim Lodi, King of Delhi. On the night before the battle Babar had sent out 5000 men to make a night attack on the Indian army, but this had failed, owing to a delay on the part of the attacking force, which did not reach the enemy's camp till dawn. With the first streaks of light next day the Mughal pickets reported that the Indians were advancing in battle array. Babar immediately prepared for action, and stationed strong flanking parties of Mughals on the right and left of his line, who, when ordered, were to wheel round and take the enemy in flank and rear. When the Indians arrived at the Mughal lines they hesitated for a moment, and Babar availed himself of their halting to attack them, at the same time sending his flanking parties to wheel round and charge them in the rear. Babar's left wing was roughly handled, but he supported it by a strong detachment from the centre, and the Indians in the end were driven back. On the right, too, the battle was obstinately contested, but Babar's artillery was the more effective, and at last the Indians fell into confusion. They maintained the battle till noon, when they gave way in all directions. The rest was mere pursuit and slaughter. According to Mughal accounts, 15,000 Indians were left dead on the field of battle, and those who fled from the field were chased as far as Agra. The body

of Ibrahim Lodi¹ was found the same afternoon amidst 5000 or 6000 of his soldiers lying in heaps around him, and was specially honoured by the victor. Babar reached Delhi on the third day after the battle, and on the Friday following his name as Emperor was read in the public prayers.

The Second great battle was fought on the 5th of November 1556 A.D., when the youthful Akbar, who had just succeeded his father, the Emperor Humayun, and his General, Bahram Khan, defeated Himu,² the General of Sultan Muhammad Shah 'Adil, nephew of Sher Shah. Himu had 50,000 cavalry and 500 elephants, besides infantry and guns; but after a well-contested battle he was wounded in the eye by an arrow, taken prisoner, and put to death. This battle was decisive of the fate of the Pathan dynasty called the Sur, founded by Sher Shah, 1540-5, and finally established the fortunes of the House of Timur.

The Third battle took place on the 7th of January 1761 A.D., when the whole strength of the Mahrattas was crushed with terrible slaughter by Ahmad Shah Durani, the Afghan King. All the Mahratta Chieftains of note, Holkar, Scindia, the Gaekwar, the Peshwa's cousin and son, were present with their forces. The Mahratta army is said to have amounted to 15,000 infantry, 55,000 cavalry, 200 guns, and Pindaris and camp-followers numbering 200,000 men. The Afghan force consisted of 38,000 infantry, 42,000 cavalry, and 70 guns, besides numerous irregulars. The Mahrattas had allowed themselves to be cooped up in their camp for many days, and were compelled to fight by impending starvation. On the morning of the battle they

¹ The alleged grave of the King lies on the N.W. side of the city.

² Himu, who had driven Humayun's Governor out of Delhi, had the misfortune to lose his guns before the battle.

marched out with the ends of their turbans loose, their heads and faces anointed with turmeric, and with every other sign of despair. Seodasheo Rao, the Bhao, the cousin and Generalissimo of the Peshwa, with Wiswas Rao, the Peshwa's eldest son, and Jaswant Rao Holkar, were opposite the Afghan Grand Wazir. The great standard of the Mahratta nation, the *Bhagwa Jhanda*, floated in the Mahratta van, and there were three *Jaripathas*, or Grand Ensigns, of the Peshwa in the field.

The Mahrattas made a tremendous charge full on the Afghan centre, and broke through 10,000 cavalry under the Wazir, which unwisely received them without advancing. The dust and confusion were so great that the combatants could only distinguish each other by their war-cries. The Wazir Shah Wali Khan, who was in full armour, threw himself from his horse to rally his men, but most of them here gave way; while Ibrahim Khan Gardi, who commanded the Mahratta artillery, broke the Rohillas who formed the right wing of the Muhammadan army, and killed or wounded 8000 of them. Ahmad Shah now evinced his generalship; he sent his personal guards to rally the fugitives, and ordered up his reserves to support the Wazir. In this protracted and close struggle the physical strength of the Afghans proved an overmatch for the slighter frames of the Hindus. A little after 2 P.M. Wiswas Rao was mortally wounded, and Seodasheo Rao, after sending a secret message to Holkar, charged into the thickest of the fight and disappeared. Whatever the message to Holkar was, it proved instantaneously fatal, for he went off, and was followed by the Gaekwar. Scindia, who left the field last, was cut down by an Afghan horseman many miles from it; he used to say that for long years afterwards

he constantly saw in his dreams his grim pursuer gaining and gaining on him, and finally leave him for dead. The Mahrattas then fled; thousands were cut down, and vast numbers were destroyed in the ditch of their entrenchment. The village of Panipat was crowded with men, women, and children, to whom the Afghans showed no mercy. They took the women and children as slaves, and after ranging the men in lines, amused themselves with cutting off their heads. The spot where Seodasheo, the Bhao, stood to watch the fight is now marked by a small monument, and is about 3 m. E. of Panipat. To the S. of this spot, near Ogra Kheri village, three gun emplacements, or mounds, still exist.

76 m. Karnal station (D.B.) (population 21,961). There is a comfortable D.B. near the Grand Trunk Road, with a dining-room, three large and one small bedrooms, each with a bathroom. A khansama is in charge, and supplies meals at ordinary rates.

A large up-to-date hospital to accommodate 130 patients was erected in 1910-11 as a memorial to King Edward VII.

The town of Karnal is traditionally of great antiquity, being said to have been founded by Raja Karna, champion of the Kauravas, in the great war of the *Mahabharata*. It was seized by the Raja of Jind in the middle of the 18th century, and wrested from him in 1795 by the adventurer George Thomas. It was conferred by Lord Lake in 1803 upon Nawab Muhammad Khan, a Mandil Pathan. A British Cantonment was maintained here until 1841, when it was abandoned, probably owing to the unhealthiness of the site, as the W. Jumna Canal, passing the city, intercepted the drainage and caused malarial fever. The canal has since been realigned. A wall

12 ft. high encloses the town. A Government Military Dairy Farm has been established in the old Cantonment lands. There is fair small-game shooting near, and fine black buck shooting 20 m. to the W.

Karnal is famous as being the place where the Persian Nadir Shah defeated the Mughal Emperor Muhammad Shah in 1739. The battle lasted two hours, 20,000 of the Indian soldiers were killed, and a much greater number taken prisoners. An immense treasure, a number of elephants, part of the artillery of the Emperor, and rich spoils of every description fell into Nadir Shah's hands. The Persian loss is variously stated at from 500 to 2500 killed. The next day Muhammad Shah surrendered himself to his conqueror, who marched to Delhi, and after a massacre in the streets and a fifty-eight days' sack returned to Persia with a booty estimated at 30 to 70 million pounds sterling (see p. 252).

99 m. Thanesar (D.B.) (population 4719) is a famous place of Hindu pilgrimage and a very ancient town, near which Shahab-ud-din Ghori was defeated by and subsequently defeated the Prithvi Raja in 1192 A.D. It was formerly the capital of a Hindu kingdom ruling the S.E. portion of the Panjab, but is now mostly in ruins. As many as 100,000 persons have been known to assemble here on the occasion of an eclipse of the moon, when it is believed that the waters of all other tanks visit the one here, so that he who bathes in it at the moment of eclipse obtains the additional merit of bathing in all the others. This Brahmasar Tank lies about 1 m. W. of the railway station called Kurukshetra junction, until a few years ago known as Thanesar junction, and is reached by passing through part of the town. It is an oblong sheet of

water 3546 ft. in length, and is not only the centre of attraction to pilgrims, but also the haunt of innumerable wild-fowl from the pelican to the snipe. It is surrounded by temples in every stage of decay, overshadowed by great trees, and flights of dilapidated steps lead down to the water on all sides. On the W. a causeway stretches out to an island where, partly hidden by trees, the most perfect of the temples stands. The ruins of this causeway extend farther S. to the remains of other temples. The area round it is known to the Hindus as the Dharma-kshetra, or the Holy Field, which was the centre of Kurukshetra, the great plain of the *Mahabharata* battle of the Kauravas and Pandavas (Introd. p. lxxii.). Traditionally the latter is 40 kos. (50 m.) in length, and extends W. to Pehowa and Kaithal, which are both sacred places. The Kurukshetra tract, containing the battlefield, is about 70 m. by 30 m. Here also the ancient Aryans, after a brief sojourn on the banks of the Indus on their way from Central Asia, made their first settlement in India and started the Hindu religion. Kurukshetra is described in Sanskrit literature, and was named Brahmavarta, or land of divine sages, "fashioned by God and chosen by the Creator." On the Sarsuti, a mile N. of the town and a mile W. of the tank, and all round at various distances, are a number of sacred sites, some identified with places actually mentioned in the *Mahabharata*.

The Town is about $\frac{1}{2}$ m. N. of the tank, and beyond it are extensive remains of the Muhammadan Fort. The chief building of interest, and that in best repair, is the white-domed Tomb of Shaikh Chilli. It is an octagon of drab-coloured marble, lighted by trellis-work windows of fine design. It stands upon a small octagonal

platform in the centre of a larger square one surrounded by cupolas. In the centre of the W. side is a small pavilion with deep caves, which also forms a tomb.

S.W. from here, within a stone's throw, is a small mosque of red sandstone (the *Lal Masjid*), supported on eight columns. The carving on the domes and elsewhere is very beautiful, and resembles that at Fatehpur-Sikri. Some of the trees in the neighbourhood are very fine.

Between Thanesar and Ambala are passed the Sarsuti (ancient Saraswati), Markanda, and other torrents issuing from the Siwaliks, and above Ambala the Ghaggar or Drishadvati.

The strip of country included between the first and last is "the Holy Land" of the Hindu faith, the first permanent home of the Aryans in India, and the spot in which their religion took shape. Hence the sanctity of the waters of the Sarsuti, to which worshippers flock from all parts of India.

There is a branch railway from Kurukshetra junction 10 m. to Narwana on the Southern Panjab Railway *via* Kaithal.

Kaithal is the headquarters of the subdivision and tahsil of the same name in the Karnal district (population 12,912). The town is picturesquely situated on the bank of an extensive artificial lake or moat, with numerous bathing places and flights of steps. During the time of the earlier Muhammadan Emperors it was a place of some importance. In 1767 it fell into the hands of the Sikh Chief Bhai Desu Singh, whose descendants, the Bhais of Kaithal, ranked among the most powerful of the Cis-Sutlej Chiefs. This territory lapsed to the British Government in 1843. The ruins of the old fort and residence of the Kaithal family stand out prominently on the high bank of the Biddiar Lake,

as it is called. A portion has been kept in repair, and is used as tahsil and police offices.

There is a civil R.H., which can be used with the permission of the Subdivisional Officer

Gharaunda.—A small village on the Grand Trunk Road, with railway station between Panipat and Karnal. To the E. of the village are still standing two handsome gateways of the old Mughal sarai. The Emperor Shah Jahan laid out a road from Delhi to Lahore, marked it at intervals of a kos with large masonry pillars shaped like acorns and called *kos minar*. At the various stages he erected large *sarais*, or fortified walled enclosures, with numerous quarters for the benefit of travellers. Most of the kos pillars still exist, but the only remains of the old sarais in the Karnal District are those of the two gates at Gharaunda. The Grand Trunk Road follows roughly the line of the old route.

123 m. **AMBALA** Cantonment junction station. Headquarters of the Sirhind Brigade, 3rd (Lahore) Division. Ambala City and Civil Station * are 5 m. farther N.W. (total population 80,131). The important Cantonments were formed in 1843; they cover 7220 acres, and are laid out with good roads and fine trees. The centre is occupied by the bungalows of the residents, and to the W. are the military lines, and the whole is surrounded by extensive Maidans.

The Racecourse is on the E. Maidan; Paget Park, a favourite resort, is on the N. There are various good European shops in the Cantonment. The city is a second-class municipal town, and the headquarters of the district.

The Cantonment Church, which

is in the Gothic style, was consecrated in 1857, and is one of the finest in India. There are also a Presbyterian and a Roman Catholic Church, a Hospital, Charitable Dispensary, and a Leper Asylum.

162 m. Kalka station (D.B.R.), the terminus of the broad-gauge railway, 2400 ft. above sea-level. A few miles 'S.E. of Kalka is the old Mughal Palace of Pinjor, in picturesque gardens.

The mountain railway from Kalka to Simla has now been open for some years. Following the line of the old Tonga Road most of the way, it passes round the W. and N. sides of the Jutogh Hill, and reaches Simla on the N. side, carried to the S. face of the Ridge by a tunnel. The gradient of nearly half the line is 1 in 33; there are 103 tunnels on it.

The fares to Simla are Rs.18, Rs.10, and Rs.3, 4½ annas. The journey up occupies seven hours; down six hours. It is wise to put on warmer clothing, at least at Solon, whenever the upward journey is made in the summer. It was under consideration to convert the line into one worked by electricity.

Only hand-luggage can be taken into the carriages.

(1) *Kasauli* is still usually reached from Kalka along a bridle-path, once the *old* Simla road. It can also be reached by the railway to Dharmpur (right column), and from there by a good and well-graded road passing up under Sanawar.

9 m. Kasauli. *—This is a Cantonment and convalescent depôt on the crest of a hill overlooking the Kalka Valley, and 6322 ft. above sea-level. The views from it are very grand and extensive. At Kasauli is the chief Pasteur Institute of India; over 10,000 cases have been treated since its opening. The Research Institute of India is also at

Kasauli. The Kasauli Club is one of the best clubs in Northern India.

The bridle-road continues on through *Kakarhatti*, *Sairi*, and *Jutogh* (see p. 289) to Simla (41 m.).

3 m. off, across a dip, the road rises to *Sanawar*, which, however, is not quite so high as Kasauli. Here is the *Lawrence Military Asylum*. From it may be seen *Dagshai* and *Sabathu*, and in the far distance *Simla*. The ground was made over to the Asylum in 1858, in fulfilment of the wish of Sir H. Lawrence. There are separate barracks for boys, girls, and infants, and a chapel. Children of pure European parentage take precedence as candidates for admission; orphans have the preference over all others. The boys qualify for the service of Government in various Departments.

(2) The railway to Simla passes first, 20 m., *Dharmpur* (D.B. good) in the territory of the Maharaja of Patiala, 4500 ft. The King Edward Consumption Hospital here is due to the initiative of Mr Malabari and the liberality of the Maharaja. From near here a road leads N. 10 m. to the summer Cantonment of *Sabathu*, lying between the old tonga and bridle-roads. The next station,

24 m. *Kumarhatti*, serves the Cantonment of *Dagshai*. The railway now passes under the Barogh Ridge by a tunnel of 3750 ft., one of the longest in India, and runs high above the fine valley of the *Giri*, famous for its mahsir fishing, to the smaller Cantonment of

28 m. *Solon* (H. and D.B.), in the State of the Rana of Baghat, 4900 ft. It then turns N. and ascends the slopes high above *Sabathu* and until it reaches a level run round to

52 m. *Tara Devi*, passing under the bold cliffs of that peak. It then winds round the W. and N. faces of the *Jutogh Hill*, the *Tonga Road*, rising 1500 ft. up the S.

face, through fine woods of pines and rhododendrons, and reaches

55 m. Jutogh, the fifth hill Cantonment served by it. Curving round the N. side of the hill the railway passes Summer Hill, and by a tunnel to Simla, 60 m. on S. of the Ridge. It has been continued $\frac{1}{2}$ m. farther East from the present terminus for goods traffic only.

The station at Simla consists of the lofty (8048 ft.) mountain of Jakko to the E., which is connected with Observatory Hill and Prospect Hill on the W. by a long Ridge. On the N. side of Jakko is Elysium Hill, so called in compliment to the sisters of Lord Auckland, who resided on it with their brother, and on the S. side the long slope of Chhota Simla, with the residence of the Lieutenant-Governor to the Panjab at Barnes Court, leads through that quarter to the stream which drains the amphitheatre formed by the Mahasu range, and to Junga, capital of the Keonthal State. On the S. face of the Ridge, where it starts from the slope of Jakko, is the native bazar, and above this are the principal European shops, the Station Church, and the Town Hall. W. of these again are the Post Office and Telegraph Office, while below the main road, called the Mall, are the District Courts, and Westward of them large blocks of Government of India offices, including those of the Army Headquarters, near the railway terminus. Farther on again, on a rocky summit, are the large offices of the Government of India, below which, on the S. side, is a link between the Mall and the Tonga Road, and on the N. side are the paths leading to Annandale (see p. 290). Half a mile farther W. again is Peterhoff Hill, on which the old Government House stands, with the office of the Foreign Department of the Government of India at its base. The Mall winds

round this Hill to Observatory Hill, on which stands Viceregal Lodge, the ordinary summer residence of the Viceroy. It was first occupied on 23rd July 1888 by Lord and Lady Dufferin during their last year of office. Since that year all the Viceroys have made it their summer headquarters, and various improvements have been effected. The latest addition is the new Council Chamber to suit modern requirements, which was completed in the year 1913-14, to form an extended wing of the main building. It is now capable of accommodating 100 members, with galleries for the Press and spectators. Below the Chamber there are suitable committee and other rooms, and a spacious library. W. of Viceregal Lodge again is Prospect Hill (7140 ft.), with a grand view down to Sabathu and up to Kasauli; beyond it (3 m.) is Jutogh and N. of it is Summer Hill. There are many beautiful walks round Jakko and some of the other hills; from the top of Jakko, famous for its fakir and the monkeys which haunt the temple, there are fine views of Chor mountain (10,000 ft.) to the S.E., and of the snows when the weather is clear. One of the prettiest walks leaves the Mall near the S. approach to the U.S. Club (which stands over the Combermere ravine running down the W. face of Jakko to the S. side of the Ridge), and winds down the lower slopes of the Chhota Simla spur as far as Bishop Cotton's school. Snowdon, the residence of the Commander-in-Chief, the Walker Hospital, founded by Sir James Walker, C.I.E., and the Mayo Orphanage, are on the Mall on the N. side of Jakko, and the Convent schools are situated at the S.W. corner.

The land upon which Simla stands was retained by the British Government as a sanatorium at the close of the Gurkha War in 1815-16, when most of the sur-

rounding district was given or restored to various Native States. Lieutenant Ross erected the first residence, a thatched wooden cottage, in 1819. His successor, Lieutenant Kennedy, in 1822 built a permanent house.¹ Other officers followed the example, and in 1826 Simla became a settlement. In 1829 Lord Amherst spent the summer there, and from that date the sanatorium grew rapidly in favour with Europeans. Since the Government of Sir John Lawrence in 1864 Simla has been the summer capital for India. As soon as the hot weather sets in, at the end of March, the Viceroy and the Officers of the Supreme Government quit Delhi for Simla, which is largely deserted in the winter,² though the Army Headquarters Offices now remain there all the year round.

The distances at Simla, taken from Christ Church, are—Round Jakko, 5 m.; Boileauganj, 2½ m.; to the end of Chhota Simla, 2 m.; round Elysium Hill, 2½ m.

Annandale is a fairly extensive plain, in a valley 1200 ft. below the Ridge on the N.W. of the station. The *Racecourse* surrounds it, and it contains *Gardens* and the *Cricket Ground* and some very fine deodar-trees. W. again of Annandale is the *Glen*, a charming wooded valley with some grassy slopes and fine timber.

Mashobra and Mahasu (5 m. and 8 m. from Simla) are pleasant places. The Viceroy has a summer retreat at the former. 8 m. beyond it is Nal Dera, a fine wood of deodars with a picturesque timber temple, from which a glimpse of the Sutlej may be obtained 5000 ft. below.

▲ magnificent view of the snows

¹ Mr. E. J. Buck's *Simla, Past and Present*, may be consulted.

² The population of Simla in midsummer was 37,895 in 1911, and is in midwinter about 15,000.

E. of Kulu is obtained from Narkanda (9600 ft.) and from the Bhági Forest beyond it. The stages of the route, each (except Mahasu) with a D.B., are as follows:—

Name of Stage	M.	Above Sea-level
Mahasu from Simla	8	8200 ft.
Fagu	12	8200 „
Theog	17	7700 „
Matiana . . .	28	7720 „
Narkanda . .	39	9500 „
Kotgarh . . .	49	6000 „

Three marches up the Sutlej Valley from Narkanda is Rampur, from which the fine wool used in Rampur *chadars* used to come. 70 m. beyond Rampur is Chini, E. of which two routes crossing the Shipki and Sholarang Passes lead to the uppermost course of the Sutlej and Gartok (14,200 ft. high). The track has been improved, and is a fairly passable route for trade with Tibet.

The Superintendent of Hill States has published a statement of rates of hire authorised in the case of Government transport on principal routes within the Simla District. (1) The rate for a mule is R.1 per stage, and 8 as. a-day for halts; (2) for a riding-pony, Rs.3 per stage and R.1, 8 as. a day for halts; (3) for a rickshaw, 8 as. per stage—if taken more than one stage in one day, 4 as. per stage payable in addition—and 8 as. a day for halts; (4) if coolies are taken more than one march out of Simla, half rates are payable for the return journey; (5) if coolies or mules are engaged through a *Chaudhri*, the following sums are due as commission—(a) coolies, 6 pies per stage, (b) mules, 2 as. per mule for the entire journey.

On the *Hindustan-Tibet Road*, from Simla to Rampur and on to Shipki, the distances are as follows (5 m. or less are half a

stage; 6 m. or more are one stage):—

	Miles.
*Simla to Kufri (P.W.D., R.H.)	8
Kufri to *Fagu (D.B.)	4
Fagu to Theog (D.B.)	5
Theog to Matiana (D.B.)	11
Matiana to Narkanda (D.B.)	11
Narkanda to Kotgarh (D.B.)	10
Kotgarh to Nirā (P.W.D., R.H.)	10
Nirā to Rampur	13
Rampur to Gaora	7
Gaora to Sarahan	10
Sarahan to Taranda	14
Taranda to Paunda	5
Paunda to Nachar	5
Nachar to Wangtu	3
Wangtu to Urni	10
Urni to Rogi	10
Rogi to Pangri	10
Pangri to Rangang	8
Rangang to Jangri (P.W.D., R.H.)	7
Jangri to Kanam	10
Kanam to Siasu	10
Siasu to Poo	10
Poo to Namgia	11
Namgin to Shipki	10

* Simla to Fagu the rate is 9 as. 9 pie per coolie if hired in Simla, including the Chaudhri's commission.

There are other routes which can be taken, viz. —(1) Narkanda to Daranghati, 7 stages, 74 m.; (2) Narkanda to Luri Bridge, 1½ stages, 13 m.; (3) Simla to Rampur, 9 stages 2 half-stages, 96 m. (*via* Kotkhai and Jubbal); (4) Fagu to Rohru, 13 stages and 1 half-stage, 129 m. (*via* Mandhol); (5) Simla to Luri, 5 stages 3 half-stages, 65 m.; (6) Simla to Kalka, 5 stages, 58 m.; (7) Simla to Kalka (*via* Kasauli), 5 stages 1 half-stage, 53 m.; (8) Simla to Nalagarh, 7 stages 4 half-stages, 83 m.; (9) Simla to Bilaspur, 3 stages 2 half-stages, 50 m.; (10) Bilaspur to Kalka, 10 stages, 86 m.

There are R.H.s or D.B.s at only some of the places on these routes. A copy of the official statement of the rates, routes, etc., should be obtained and studied before starting.

Another route from Simla to Mussoorie, 151 m., is often taken

as an excursion in the hills. The following itinerary has been furnished by one who has taken it:—

Simla to Mussoorie (151 m.).

	Miles.	Feet.
Simla (7000 ft.) to Fagu * (D.B.)	12	8200
Fagu to Sainj (B.)	8	4400
Sainj to Kotkhai (B.)	13½	5000
Kotkhai to Jubbal (R.H.)	14	6000
Jubbal to Arakot (F.B.)	17	3650
Arakot to Tiuni (F.B.)	9	3900
Tiuni to Kathian (F.B.)	{ Road, 12 } { Path, 9 }	6600
Kathian to Mundali (F.B.)	12	8200
Mundali to Deoban (F.B.)	12	9000
Deoban to Chakrata * (D.B.)	6	6900
(to bungalow)		
Chakrata to Churani, or Chaurani		
Pani (D.B.)	9	7200
Churani Panito Lakhwar (D.B.)	12	3700
Lakhwar to Mussoorie	15	6500

All bungalows are furnished, but crockery, cutlery, and cooking utensils must be taken for use in the bungalows other than those marked * (D.B.s). But in the forest bungalows there are only beds and other furniture for two persons, and camp-beds, etc., should be taken if the party consists of more than two.

The road is passable for riding-ponies all the way. Mules for transport (R.1 *per diem*) are obtainable through the Tahsildar at Simla Cutcherry, where printed rates can be seen.

Bungalows at Sainj, Jabbal (Deora), and Kotkhai, which are in Native Hill States, can be occupied on obtaining *parwanas* from the Deputy-Commissioner, Simla. Leave to occupy F.B.s at Arakot, Tiuni, Kathian, Mundali, Deoban, has to be obtained from the Divisional Forest Officer, Chakrata.

A number of routes from Simla, in the neighbourhood, to Kashmir and in the Himalayas, will be found in Appendix III. of Mr E. J. Buck's *Simla, Past and Present*, with useful "Hints to Travellers in the Himalayas and Simla Hills."

Sultanpur, the old residence of the Chiefs of Kulu, in the Kulu Valley, is approached by way of Simla; it is a long and somewhat tedious expedition, but the scenery cannot be surpassed for gran-

deur, and the forests abound in pheasants and other game. Farther up amongst the high peaks sportsmen will find ibex and bears. The following are the marches:—

From	To	Height above Sea- level.	Accommodation.	Country.	Dis- tance.
Narkanda	Luhri	Feet 2500	G.B. Vil. on N. side of Sutlej *	Descent of 6500 ft. in	M. 12½
Luhri	Ani	4100	G.B. and vil. Salva- tion Army Fruit Farm and Mission.	Cross Sutlej, gradual de- scent for 5 m. and easy ascent for 6½ m.	11½ in all.
Ani Khanág	Khanág Shoja	8300 8800	G.B. and vil. G.B. No vil.	Steep ascent Cross Jalori pass at 10,000 ft.	9 7
Shoja	Banjár	5000	G.B. and vil., tahsil, thana, hospital, school	Descent all the way	10½
Banjár	Lárji	3100	Bungalow badly placed, accommo- dation poor, small vil.	Grand gorges of Biás, Sanij and Tirthan rivers; de- scent nearly all the way.	12
Lárji	Bajaura	3600	G.B. (with khan- sama), post and telegraph office	Up Biás River, gradual ascent	11
Bajaura	Sultanpur	3994	G.B., hospitals for men and animals, thana, tahsil, R.H. and D.B., post and telegraph office	Gradual as- cent up Biás River	9

Note.—G. B. = good bungalow.

At Bajaura there is a stone temple, dedicated to Siva, with very fine carvings. Three niches in the outer wall contain bas-reliefs representing Ganesh, Vishnu, and Parvati slaying the demons. On both sides of the entrance are figures of the river goddesses Ganga (the Ganges) and Yamuna (the Jumna) (see *Archeological Survey Report* for 1909-10).

At Sultanpur is the temple of

Raghunath (another name for Ram Chandar), which was built by Raja Jagat Singh of Kulu, who was a contemporary of Aurangzeb. On the occasion of the Dasahra festival (see p. lxxiv) all the idols of the valley are brought to Sultanpur to do homage to Raghunath.

At Manali is the wood-carved temple of the goddess Harimba, or Hirma Devi, once the patron

goddess of the Kulu Valley, to whom human sacrifices used to be offered only a few generations ago.

One march N. of Sultanpur is Nagar, the headquarters of Kulu, and two marches [Manali (6300 ft.) and Kothi (8000 ft.)] farther on, through the lovely scenery of the Upper Bias Valley, is the Rohtang Pass (13,000 ft.) into Lahaul.

(2)

Delhi to Lahore *via* Ghaziabad.

4 m. Shahdara. $4\frac{1}{2}$ m. S. of this and near the once flourishing market of Patpargarj is the field of the Battle of Delhi, in which Lord Lake defeated the Mahratta troops under M. Bourquin on 11th September 1803 after a brief but severe fight. An obelisk on the spot commemorates the officers who fell in the engagement.

13 m. Ghaziabad junction station.* From this point the E.I. Railway runs S.E. to Allahabad and Calcutta, and the Oudh and Rohilkhand Railway E. to Moradabad (100 m.) (see p. 372.) Near this place, then called Ghazi-ud-din-nagar, the small force under Brigadier-General Archdale Wilson twice defeated the Meerut and Delhi mutineers on 30th and 31st May 1857.

41 m. from Delhi, Meerut city station. 308 m. from Lahore. (By road, 42 m. to Delhi; 81 m. to Aligarh; 14 m. to Sardhana; 65 m. to Roorkee; 32 m. to Bagpat, on the Jumna.) Petrol and motor accessories can be obtained from Messrs Graduate Brothers, Dinshaw & Co., and the Provincial Motor Co.

41 m. Meerut Cantonment *, (D.B.) (combined population

116,227). This Cantonment is the headquarters of the 7th Army Division, and is known in history as the scene of the outbreak of mutiny of the Indian army (on Sunday, 10th May 1857). This began with the 3rd Bengal Cavalry (eighty troopers of this regiment having been imprisoned the previous day with unnecessary degradation for refusing to receive cartridges of the old pattern), and was intended to ensure the murder of all the Europeans of the place while at evening service, but it miscarried by a happy accident. A number of officers and others were, however, murdered, and most of the houses of the S. Cantonment were burned; and finally the mutineers (consisting of the 3rd Bengal Cavalry and the 11th and 20th regiments Native Infantry) marched off to Delhi unpursued. The English force in Meerut consisted of the 60th Rifles, the Carabineers, and one battery of Royal Artillery, of Horse Artillery, and of Foot Artillery, and the native force of about 2500 men. Every one should read the story of the Mutiny of Meerut, as told in Colonel A. R. D. Mackenzie's *Mutiny Memoirs*.

The station is very extensive, measuring $3\frac{1}{2}$ m. from the railway on the W. to the police lines on the extreme E., traversed by the Mall, one of the finest in India, and 3 m. from where the Bulandshahr Road, on the S., leaves the station, to the end of Church Street. The European Cavalry Barracks are of remarkable extent. As in 1857, these and the other British Barracks lie to the N. of the Church, and the lines of the native troops to the S.

St John's Church, completed 1821, in the Italian style, was the first Church erected in the Upper Provinces of India. There are tablets in it to a great number of officers who have been killed in action or have died in Upper India.

The large Cemetery, which lies to the N.W. of the Church, is divided into two parts—the new being marked by crosses and English tombs, the old by cupolas and pyramids. The pillar, 50 ft. high, was erected to Sir R. Rollo Gillespie, who subdued the mutiny at Vellore (p. 537), and fell in the Gurdak War. Sir D. Ochterlony also is buried here.

The site of the old **Central Jail**, (now abolished) is occupied by the Victoria Park, in which there is a 9-hole golf-course.

Temples. — The *Suraj Kund*, commonly called by Europeans the "Monkey Tank," filled by water from the Ganges Canal, lies to the W. of the Jail. "It was constructed by Jowahir Mal, a wealthy merchant of Lawar, in 1714. There are numerous small temples, dharmshalas, and *sati* pillars on its banks, but none of any note." The *Baleswar Nath Temple* is the oldest in the District, and dates from before the Muhammadan invasion. The *Darga*, in the Nau Chandi Mahalla, is said to have been built by Kutb-ud-din from the remains of a Hindu temple which he pulled down. The *Darga of Shah Pir* is a fine structure of red sandstone, erected about 1620 A.D. by Nur Jahan, in memory of a pious fakir of that name. The *Jami Masjid* is said to have been built in 1019 by Hasan Mahdi, Wazir of Mahmud Ghaznavi, and was repaired by Humayun. The *Makbara* of Salar Masa-ud Ghazi is attributed to Kutb-ud-din Aibak in 1191. There are two large *Imambaras*—one near the Kamboli Gate and another in the Zabidi Mahalla—and an *Idgah* on the Delhi Road, built in 1600. There is a mosque built by Nawab Khairandesh Khan in the Saraiganj. And besides those already mentioned there are 62 mosques and 60

temples in the city, none of which, however, deserve any particular notice.

Before reaching Sardhana the Ganges Canal, made by Sir Proby Cautley, is crossed.

51 m. **Sardhana station** (D.B.) is connected with Walter Reinhardt, known as Samru, of Walloon origin, who came out to India as a carpenter in the French Navy. He became leader of a band of European deserters and sepoys, whom he brought to an unusual state of discipline; and after serving under several Native Chiefs, he joined one Gregory, an Armenian, who was high in the favour of Mir Kasim,¹ the Nawab of Bengal. It was after the fall of Monghyr (p. 419) that he did his employer the base service of putting to death, on 6th October 1763, all the 60 English gentlemen and 100 others, all prisoners, who had been collected at Patna (p. 49). He next joined the Bharatpur Chief, and from him finally went over to Najaf Khan, from whom he received a grant of the Pargana of Sardhana, then valued at 6 lakhs a year. He died at Agra in 1778, and his Begam, originally a Kashmir dancing-girl, was recognised as his widow, and succeeded to his domains. She became a Roman Catholic in 1784, and married a French adventurer named Le Vaisseau (1792), who, having shown himself incompetent, was induced to commit suicide. The revolt which he had caused was quelled by the aid of the Englishman George Thomas, and by a son of Samru, Zafaryab Khan. At his death (1802) the Begam gave her daughter in marriage to Mr Dyce, one of her officers, afterwards Colonel Dyce, and their son, Dyce Sombre, in 1840 married

¹ Less fortunate than Samru, Mir Kasim died a beggar in Delhi, his last shawl being sold to defray his funeral expenses.

Lady Mary Jervis, daughter of Earl St Vincent, afterwards Lady Forester. The Begam was a woman of shrewd ability, and, after keeping up a good understanding with the British Government, her forces were received into British pay. She died in 1836. The Begam was thus described by Major Thorn, who saw her in 1806: "She appeared to be about fifty-three years of age, of middling size and fair complexion. She was the constant attendant at headquarters, dressed in the European style with a hat and veil, sometimes riding in a palanquin, and at other times on a horse or an elephant" (*Memoir of the War in India*). Keene's *European Free-lances in India* gives much interesting information about the Begam and her connections.

E. of the town is a modern English mansion, built 1834, and called the Palace, with a grand flight of steps at the entrance. It stands in a garden of 50 acres, and is commonly known as the Kothi Dilkusha. Within it were two framed inscriptions recording the charities of H.H. the Begam Samru in Sardhana, and portraits of the Begam and her friends, with George Thomas, General Ochterlony, Sir C. Metcalfe, Lord Combermere, Colonel Boileau, General Ventura, her butler, etc. The house has lately been sold by the family.

The R.C. Cathedral, built by the Begam Samru, is outside the town on the S. It is an imposing building, standing in an enclosure, surrounded by an ornamental wall. By the side entrance, on the right, is the Begam's white marble monument, made at Rome. Close by is the R.C. College, a low masonry house, which was once the Begam's own residence. It is intended for the instruction of native priests, and was endowed by the Begam. There are fifty pupils,

taught by the Italian priest and his curate.

111 m. from Delhi, *via* Ghaziabad, is Saharanpur junction station * (R., D.B.) Saharanpur is, by road, 77 m. to Chakrata, 43 m. to Dehra Dun. From Saharanpur the Oudh and Rohilkhand Railway runs S.E. to Lucknow and Benares (see Route 20). (Population 62,850, including a large railway settlement).

The town was founded in the reign of Muhammad Tughlak about 1340, and named from Shah Haran Chishti, whose shrine is still much visited by Muhammadans and Hindus also. It was a favourite place of summer resort of the Mughal court. In the reign of Shah Jahan a royal hunting-seat, called Badshah Mahal, was built by 'Ali Mardan Khan, the projector of the Eastern Jumna Canal. The canal was neglected during the decline of the Mughal Empire, and was never of much utility till the District came under British rule, when Sir P. Cautley (1802-1871) reconstructed it, and since then cultivation has spread on every side. In 1857 the station was successfully held by the Collector, Mr Spankie, with assistance afforded him from Ambala.

There are an Anglican Church, consecrated in 1858, and an American Presbyterian Church, and a mission from that body. An old Rohilla fort is used as a Jail. A handsome modern mosque has been erected on the plan of the Jami Masjid at Delhi. The main attractions of the place, however, are the extensive Government Botanical Gardens, which attained their centenary in 1917 as a public garden. Many valuable plants have been acclimatised there, and 464 various fruit-trees have been catalogued. The horticultural training classes form an important feature. Vegetable seeds are produced in quantities for distribution. The gardens have

finally ceased to grow drugs for the Medical Department. Near the entrance by the N. gate is the Agricutural Garden, and beyond it to the E. the Medicinal Garden; beyond this to the S. is the Linnæan Garden. The main working divisions are the horticultural department, the Doab Canal Tree nursery, the nurseries for cuttings, bulbous plants, fruit-trees, and seedlings. There are also a Hindu temple and a tank and wells in the gardens, and the S.E. gate leads to some *sati* monuments and *chhatris*. The most picturesque spot in it is an island shaded by clumps of bamboo and surrounded by lotus. There is also a Remount Depot.

Saharanpur is celebrated as the station whence the Trigonometrical Survey of the Himalayas was commenced. The snowy peaks add much sublimity to the view to the N.

162 m. from Delhi, *via* Ghaziabad, is Ambala Cantonment station (p. 287).

179 m. Rajpura junction station (D.B.). From here a branch line runs S.W. 16 m. to Patiala and 32 m. to Nabha, the capitals of the two Jat Sikh States so named. These two, with Jind, form the three Phulkian States of the Malwai Sikhs, who lie S. of the Sutlej, the Manjha Sikhs occupying the Bari Doab across that river. Patiala is the capital of the wealthiest and most populous State in the Panjab. The Palaces of the Maharaja in the Barahdari Gardens and at Moti Bagh, the Mohindar College, the Fort, the Temple of Mahakali and Rajeswari, the Hospital, Waterworks, and King Edward Memorial, are the chief buildings and sights of interest. The residential quarter is well laid out, and there are fine cricket and polo grounds. The present Maharajadhiraja, His Highness Lieut.-Col. Sri Sir Bhupendra

Singh Mahindar Bahadur, G.C.I.E., G.B.E., succeeded his father in 1900. The Imperial Service troops, furnished by the State, number 1800, of which a third are cavalry. All these troops were sent to the front to take part in the War.

Jind, the second of the Phulkian States, gave loyal assistance to the British Government in 1857, and was similarly rewarded. The capital is Sangrur, on the Ludhiana-Jakhal Railway. Its principal buildings are the Diwan Khana, the Barahdari, the State Library, Skating Rink, Ranbir Silver Jubilee Orphanage, Lady Minto Ranbir Girls' School, and Victoria Golden Jubilee Hospital: also a D.B. His Highness the present Maharaja, Hon. Lieut.-Col. Sir Ranbir Singh Bahadur, G.C.I.E., K.C.S.I., received his full powers in 1899. 600 Imperial Service troops are supported by the State and fought for long at the front. Nabha town contains little of interest besides its four gardens. The present Maharaja is the son of the late Maharaja Colonel Sir Hira Singh, G.C.S.I., G.C.I.E., well known for his loyalty to the British Government, who died on 25th December 1911, after a rule of forty years.

From Nabha the line runs W. to Bhatinda on the Rewari-Ferozepore line, and is crossed at Dhuri by the line from Ludhiana (see p. 298) to Jakhal on the S. Panjab line 108 m.

195 m. Sirhind station. The name of this town was formerly applied to a very extensive tract, which included the Ambala District and the Native States of Patiala, Jind, and Nabha. In Cunningham's *Archæological Survey* (ii. 205) a very interesting account of it will be found. It is the place where many Afghan Princes of Shah Shuja's family and other Muhammadans of note are buried.

It is mentioned by Ferishta as the most Eastern possession of the Brahman Kings of Kabul. After they were conquered by Mahmud it became the frontier town of the Moslems, whence its name of Sirhind, or Sar-i-hind, "Frontier of Hind." It must have been a place of importance as long back as 1191 A.D., when it was taken by Shahab-ud-din Ghori, and besieged by Rai Pithora (Prithvi Raja) for thirteen months. At that early date it had a separate governor.

For the century and a half that intervened between the accession of Akbar and the death of Aurangzeb Sirhind was one of the most flourishing cities of the Mughal Empire. Many tombs and mosques are yet standing, and heaps of brick ruins surround the old city for several miles. In 1709 the city was taken and plundered by the Sikh Chief Banda, who put the governor, Wazir Khan, to death in revenge for the murder of Guru Govind's mother and children. In December 1763 Sirhind was taken and totally destroyed by the Sikhs. Even to this day every Sikh, on passing through Sirhind, carries away a brick, which he throws into the Sutlej in the hope that in time the detested city will thus be utterly removed from the face of the earth. The finest and oldest building is the

Tomb of Mir Miran. This is of stone, and is surmounted by a large central dome on an octagonal base, with a smaller dome at each of the four corners on a square base. Each of the four sides is pierced by a recessed doorway with a pointed arch covered by a second loftier and larger arch. The dead walls are relieved by squares of blue enamelled tiles. The general effect is decidedly good, and altogether this tomb is one of the most pleasing and per-

fect specimens of the later Pathan architecture.

The **Largest Tomb** is a plain brick building. At the four corners are very small turrets, which look mean beside the lofty central dome of 40 ft. diameter which crowns the building. The next tomb in size is another red brick building, attributed to *Khoja Khan*. The great dome is 36 ft. in diameter outside. This building is probably of the 15th century. There is a pretty little octagonal **Tomb of Pirbandi Nakshwala** (or the painter). It is on open arches, and is surmounted by the pear-shaped dome of the Mughal period. The body of the building is profusely covered with paintings of flowers, and the roof with glazed tiles, arranged so that the melon-like divisions of the dome are marked by dark blue lines, and the intervals by coloured tiles laid herring-bone fashion, beginning with yellowish pale green at the top, and ending with dark green at the bottom. The only mosque worth mentioning is that of *Sadan Kasai*, to the N. of the present town. The W. end has fallen down. The centre space is covered by a dome 45 ft. in diameter.

The *Haveli* or mansion of Salabat Beg is perhaps the largest specimen of the domestic architecture of the Muhammadans of the Mughal Empire. It consists of two great piles of brick, each 60 ft. sq. and about 80 ft. high, connected by high dead walls.

The great *Sarai* of the Mughal emperors is to the S.E. of the city. It is now used as a public audience-hall by the Patiala authorities, and is called the *Amkhas*.

Beyond Sirhind the railway crosses the **Great Sirhind Canal** (opened in 1882), one of the largest irrigation canals in the world. It draws its water from the Sutlej

at Rupar (20 m. distant from Doraha), and, passing through Ludhiana and Patiala, with side branches to Nabha, Jind, and other native States of the Panjab, eventually irrigates the S. half of the Ferozepore District. At Rupar Lord Wm. Bentinck had a famous meeting with Maharaja Ranjit Singh in October 1831.

233 m. Ludhiana junction (D.B.). This is a municipal town and headquarters of a District of the same name. (Population 44,170, of whom much the greater portion are Muhammadans.) It is a great grain market, and famous for its shawls made from Pashmina wool, also for the manufacture of Ram-pur *chadars*. It is situated near the S. bank of the Sutlej, 8 m. from the present bed of the river. Ludhiana is now an important junction on the North-Western Railway for the three lines—Main Line, Ludhiana - Ferozepore, and Ludhiana - Dhuri - Jakhal. The Fort lies to the N.W. of the city, and under it is a Shrine of Pir-i-Dastgir, or 'Abdul Kadir Gilani.

Ludhiana was founded in 1480 by two Princes of the Lodi family. In 1809 General Ochterlony occupied it as Political Agent for the Cis-Sutlej States, and from 1834 to 1854 the town was a military station. The Church and Public Gardens are to the S. of the city. There has been an American Presbyterian Mission here since 1840. The Fort has been temporarily made over to the Salvation Army, who have opened an Industrial School called the "Sir Louis Dane Weaving School."

There is a well-furnished D.B. not far from the railway station. There is also the N. India School of Medicine for Native Women at Ludhiana. In this school native women can qualify themselves for the post of sub-assistant surgeon. This is the only school of the kind in the

Panjab. The school is managed by the Medical Missionary Society.

Three of the great battles of the First Sikh War were fought between Ludhiana and Ferozepore—viz., Mudki, Ferozeshah, and Aliwal. The first two are noticed at p. 353. Aliwal lies 16 m. W. of Ludhiana, and must be reached by riding. In the battle here Sir Harry Smith, with a force of 10,000 men, defeated a body of 20,000 Sikhs under Sirdar Ranjodh Singh, who had slightly worsted him a week previously at Badoval. There is there an *Obelisk* with the inscription, "Aliwal, 26th January 1846," repeated in Persian and Gurmukhi.

A line of railway now runs from Ludhiana to Ferozepore (p. 352).

241 m. Phillaur. Beyond the Sutlej, crossed by a fine bridge, of which it was necessary to sink the foundations to an extraordinary depth, is the old Mughal Sarai and Sikh Fort of Phillaur, now used as a Police Training School. It was just saved from the mutineers in May 1857 by the despatch of British troops from Jullundur, and was held successfully when the native regiments in the latter station mutinied on 17th June. The civil authorities in Ludhiana did all in their power to prevent the mutineers crossing the Sutlej, Mr T. H. Thornton (C.S.I.), an Assistant-Commissioner of a few weeks' standing, cutting the bridge of boats, and Mr G. H. M. Ricketts, C.B., the Deputy-Commissioner, boldly facing them with a few of Rattray's Sikhs; but the mutineers got past them, and, after looting the Ludhiana station, went on to Delhi.

265 m. Jullundur city station.

265 m. Jullundur Cantonment station, * (D.B.). A municipal city, Cantonment, and head-

quarters of a Division and district. The city (station 3 m. farther N.) has with the Cantonment a population of 55,182, of whom the greater number are Muhammadans. Anciently it was the capital of the kingdom of Jalandhar, or Trigarta, which, after the Muhammadan invasion, survived in the Hill State of Kangra (see p. 305). Hiuen Tsang, the Chinese pilgrim of the 7th century A.D., describes the town as 2 m. in circuit; now two ancient Tanks are all that are left of this. Under the Mughal Empire it formed the capital of the country between the Sutlej and the Bías. The modern city consists of a cluster of wards, each formerly surrounded by a wall. There is a fine *Sarai* built by Karam Bakhsh.

The Church, $\frac{1}{2}$ m. W. of the artillery lines, erected in 1852, is a long building without any tower.

The American Presbyterian Mission maintains an excellent school. The Cantonment, which is considered a healthy one, was established in 1846, and has an area of $7\frac{1}{2}$ sq. m. The garrison consists of one British Infantry Regiment, one Native Cavalry Regiment, two Native Infantry Regiments, and a Battery of Field Artillery. Though a British regiment (the 8th King's) and a battery of artillery were present here in May 1857, and, though the Phillaur Fort was secured by the former under the orders of Brigadier Hartley, no steps were taken by Brigadier-General Johnstone, who had succeeded Hartley before the actual outbreak occurred, to disarm the 36th and 61st Regiments of Native Infantry, and when these mutinied on 7th June and started for Delhi, no pursuit of them was ordered until it was too late.

The Public Gardens in the military Cantonment are well laid out.

The Native State of Kapurthala lies 15 m. S.W. Good road. From the Kartarpur station to Kapurthala is only 7 m. The latter and Hoshiarpur are now connected by railway with the Jullundur district.

288 m. to 291 m. Between East Bank and Bías, the river of that name is crossed.

317 m. AMRITSAR junction station* (D.B.), about $\frac{1}{4}$ m. W. of the city. A branch line from here goes N.E. 67 m. to Pathankot for Dalhousie, etc. (see p. 304). Another branch line from here goes to Tarn Taran-Kasur.

Amritsar is a city with a population of 152,756. It is the wealthiest next to Delhi, and, after that place and Lahore, the most populous city of the Panjab and the religious capital of the Sikhs. It was founded in 1577 by Ram Das, 4th Guru of the Sikhs, upon a site granted by the Emperor Akbar around a sacred tank, from which the city takes its name, "Pool of Nectar." Ahmad Shah Durani destroyed it in 1762, blew up the temple, and defiled the shrines. This was the last occasion on which the temple was interfered with: it was rebuilt in 1764. After Ahmad Shah's retirement the city was divided amongst the various Sikh Chiefs, to each of whom was assigned a separate ward; but it gradually passed into the power of the Bhangi Misl, who remained supreme till 1802. In that year Ranjit Singh seized it, and roofed the great shrine with sheets of copper gilt; hence it was called the Golden Temple. He also built in 1805-09 on the S.W. the Fort of Govindgarh in order to overawe the pilgrims, and surrounded the city with a massive wall, the greater part of which has been demolished since the British occupation.

The manufactures for which Amritsar is most famous are those of Pashmina, silk, and carpets.

Rai, the younger son of Guru Har Govind, who is said to have been reproved by his father for raising the deceased child of a widow to life, on the ground that the supernatural powers ought to be displayed in purity of doctrine and holiness of life, and not in miracles. Thereupon Atal Rai said that as a life was required and he had withheld one, he would yield up his own, and so lay down and died.

Outside the Temple enclosure on the E. are the lofty plain **Ramgarhia Minars**. The one to the N. may be ascended. At the top there is a good view to the N.W., taking in a white temple to Siva at the extremity of the city, built by Sardar Tej Singh. To the N.E., at 1 m. off, St Paul's Church is seen peeping out among woods, close to the D.B. Govindgarh Fort appears to the S.W.

The return journey may be made by the Rambagh Gate of the city. To the left is the mosque of Muhammad Jan, with three white domes and slender minarets. Farther to the N. is the 'Idgah; and close to it is the mosque of Khan Muhammad. In front of the gate, and just across the railway, are the pretty Rambagh Public Gardens which are about 40 acres in extent. In the centre is a pavilion in which Ranjit Singh used to stop when he came to Amritsar. Before entering the gardens the Civil and Municipal Hospitals are passed.

The Fort of Govindgarh is a short distance to the S.W. of the city. It is usually garrisoned with a company of Artillery and a company of British Infantry. It was completed by Ranjit Singh in 1809, the fortifications being traced by the French officers in his service. In May 1857 it was secured by British troops sent over from Lahore in ekkas. French names are still on the walls—e.g., *Ronde de l'Est*.

Amritsar is within the Lahore Diocese and there is an English

Church in the Civil Station and usually a resident chaplain. There is also a Roman Catholic Church. The principal Mission is that conducted by the Church Missionary Society. This Society maintains High Schools for Boys and Girls and a Hospital. The Zenana Bible and Medical Mission maintains the St Catherine's Hospital for Women.

2½ m. W. of Amritsar station, on the Grand Trunk Road, is the Khalsa College, which was founded in 1882. This is the National College for Sikhs and it is affiliated to the Panjab University in Arts and Science. It has a large staff, including an European Principal and two European Professors, and accommodates about 700 students, most of whom are residents in the College hostels. The Khalsa College was honoured by a visit from the Prince of Wales, now His Majesty King George V., on the 11th December 1905.

The other educational institutions in the station are:—the Government High School; the Muhammadan Anglo-Oriental High School; the Hindu Sabha High School; the Pandit Baij Nath High School; the Dayanand Anglo-Vedic High School; and the Government Clerical and Commercial School.

Government maintains a Civil Hospital under the charge of a Civil Surgeon. The Amritsar Municipality also maintains a Hospital and Dispensary, and is building the Princess of Wales' Hospital, of which the foundation-stone was laid by Her Excellency Lady Chelmsford on the 16th April 1917.

The Amritsar Municipality has now given the city a good water-supply. A sewage-disposal scheme has also been completed and an Electric Power-station built.

Amritsar is the headquarters of the Deputy-Commissioner of the Amritsar District.

The principal fairs held here are at the Baisakhi festival in April

and at the Diwali festival in November, both at Amritsar city. They are primarily religious fairs, but gradually came to be utilised for the buying and selling of agricultural stock, and now are the fairs best known and most largely attended in the province.

14 m. to the S. of Amritsar is Tarn Taran, (D.B.), a place very holy to the Sikhs, through which a line runs to Patti and Kasur (p. 353).

The Temple and Tower are situated on the E. side of a magnificent tank, which is kept full of water from the Bari Doab Canal. This tank was made by Maharaja Ranjit Singh when he built the temple. Boots must be taken off and cloth slippers put on before descending into the enclosure. The lower room of the temple has been handsomely painted with representations of trees, while the outside walls have paintings of gods and goddesses. The room has a corridor round it, on the S. side of which is the *Granth*, enveloped in silk wrappers, and fanned by an official with a *chauri*.

This place was the residence of the Guru Arjan, and is older than Amritsar; unlike the temples at that city, it has no writings on the walls. There is a small pavilion with open sides on the roof. The tank is said to possess miraculous powers to cure the lepers who can swim across it. At its N. corner is a tower built by Nau Nihal Singh.

The neighbourhood is famous as the stronghold of the Manjha Sikhs, and the former recruiting-ground for their army. There is a leper asylum outside the town, and a suburb inhabited by those infected with the disease, from which it is said the Guru Arjan himself suffered.

At Amritsar passengers for Dalhousie, Chamba, Kangra, and Dharmasala change on to the Amritsar - Pathankot Railway; and passengers for Tarn Taran change on to the Amritsar-Pahti Railway.

24 m. Batala.

47 m. Gurdaspur, headquarters of a district.

16 m. from Gurdaspur, and connected by a driving-road, is Kalanaur (district R.H.), where is the monument to indicate the site of the buildings and gardens erected by the Emperor Akbar to mark the place where he was proclaimed Emperor and crowned on receipt of the news of his father's death. 7 m. farther on is the town of Dera Nanak, where the celebrated Sikh Guru, Baba Nanak, lived and preached. The golden temple here is very beautiful and well worth a visit.

9 m. N.W. of Gurdaspur is the Trimmu Ghat of the Ravi, where Brigadier-General Nicholson defeated the Sialkot mutineers (p. 323) on 12th July. Four days later the remnants of them were attacked on an island in the river, and all destroyed or captured. General Nicholson had been obliged by events to return from Phillaur to Amritsar with the Movable Column, having disbanded the Native Infantry regiments with it at the former place and the 59th Regiment at the latter.

67 m. Pathankot terminus station (R., D.B., and R.H.). 8 m. to the N., on the high bank of the River Ravi, is the picturesque Shahpur Kandi Fort, dating back to the 16th century, with a R.H. in one of the old towers. The Rajas of Pathan often rebelled against the Mughal Emperors. Driven back in the hills, they

settled at Nurpur, but still retained the clan name Pathanias. From Pathankot tongas proceed direct to Dalhousie, 52 m., or the journey can be broken at Danera, 28 m., where there is a hotel. Special tonga, Rs. 33; seat in the mail tonga, Rs. 15, as 8; motor-car to Danera, Rs. 30.

Dalhousie is a charming hill station and sanatorium, with a military Cantonment at Balun (5500 ft.) and military locations at Ticca Spur, Mankot, and Banikhet. The population in the winter of 1911 was 938; and in summer 3952. From Dalhousie a visit may be paid to Chamba (D.B.), the capital of the Hill State of the same name, ruled by one of the most ancient Rajput houses of India.¹ The scenery is very fine, especially between Dalhousie and Chamba (20 m. distant across the Ravi), where the summer road passes at an average height of 8100 ft. for 6 m. through one of the most beautiful forests in the world. At 11 m. from Dalhousie, 9 m. from Chamba, is the "Marg," or green open space of the hamlet of Khajiar (6400 ft., D.B. and R.H.), a circle of green sward having a perimeter of 1 m., with a lake in the middle, in the midst of magnificent dark cedar forests (well worth a visit), under the slopes of Dain Kund (9160 ft.) from the summit of which a most splendid semicircle of snow-capped heights is to be seen—one of the finest views in the world. The lower or winter road is 21 m. (Chil, 12 m., and 9 m. to Chamba.)

The Chamba State, which comprises the Upper Ravi and part of the Chenab Valley, is very rich in ancient remains.² Chamba is a most Italian-looking town, on a plateau about 400 ft. above the

river, with old temples, well worth seeing; it is lit by electricity, with electric fans in all public buildings. Sir Bhuri Singh, K.C.S.I., C.I.E., is the present Raja of Chamba; the Commissioner of Lahore is the Political Agent. An interesting collection of ancient inscriptions, pictures, weapons, and other antiquities is contained in the State Museum, founded by the Raja Sir Bhuri Singh in 1908 and named after him (*Illustrated Catalogue*, by Dr Vogel, Calcutta, 1909). On the N. end of the *Maidan* (here called Chaugan) is the hospital named after Raja Sham Singh (died 1904 A.D.), and on the other end the Residency used for the accommodation of distinguished visitors. Opposite the Museum are the Presbyterian Church and the Mission House of the Church of Scotland Mission.

Intending visitors to Chamba should bear in mind that the place, being situated in the Ravi Valley, is very hot during June-August.

From Chamba there branch off roads to Kashmir, to Pangi (over the Sach Pass), to Barmoar, and on to Chamba Lahoul, and Kulu Lahoul. There are D.Bs. at Khajiar (closed for some months in the winter) and at Chamba. Travellers desiring information, as to routes, coolie hire, and accommodation can apply to the Chamba State Vakil, Dalhousie, or to the Assistant Commissioner, Dalhousie.

Dharmasala (D.B.), the headquarters of the Kangra District, is reached (50 m.) by a good metalled tonga road from the railway station at Pathankot. As far as Nurpur (16 m.) the country is surveyed for an extension of the railway from Pathankot; the road onwards passes through very pretty, fertile, and well-watered country. At Nurpur¹ (ancient

¹ See *Chamba State Gazetteer* (Lahore, 1910), Section B., History, pp. 41-117.

² See *Antiquities of Chamba State* (Calcutta, 1911), by Dr J. Ph. Vogel of the Archaeol. Survey of India.

¹ On the ruined temple in the fort, see *Arch. Survey, Ann. Rep.*, 1904-5, pp. 110-120.

fort, with ruined temple), Kotla (29 m.), and Shahpur (40 m.), there are D.Bs. The new Civil Station of Dharmsala, erected since the earthquake on the site of the old Gurkha Cantonment, at a height of about 4500 ft., is reached at 56 m. Thence the road is unmetalled and leads to the upper station and Gurkha Cantonment, which lies at an elevation of about 5500 ft. This is in the midst of fine forest trees, and overshadowed by the great rock wall of the Dhaula Dhar, which rises to 16,000 ft. Above this, at Dharmkot, are the summer quarters of the American United Presbyterian Mission. In the centre of the upper station are the ruins of the Church of St John in the Wilderness, which, with the entire station, was destroyed in the earthquake of 1905; it is now being rebuilt. In the churchyard is the tomb of the Earl of Elgin and Kincardine, Viceroy 1862-3, who died in the station. This tomb was very badly damaged in the earthquake, but has since been restored.

Above the upper station one of the main spurs of the Himalayas rises steeply to a height of 16,000 ft. to 17,000 ft. The scenery is grand and imposing, the great granite mountains appearing almost to overhang the station, while the view S.E., S., and S.W., over the rich and lovely Kangra Valley and the Sewalikhs and intervening foot-hills, fading from purple to mauve in the distance, is one of extreme beauty. The River Biás, which runs through the District, and is renowned for its mahseer fishing, can be seen when the atmosphere is clear.

15 m. S. Kangra (2500 ft.), anciently known as Nagarkot, occupies both slopes of a hill overlooking the Banganga torrent. The name Kangra properly belongs to the fort, which crowns a

precipitous rock, rising sheer above the Banganga, and dominates the whole surrounding valley. The temple of Devi Bajresri, on the northern declivity, ranks amongst the oldest and most wealthy shrines in India, but both it and the fort were destroyed in the earthquake: the temple has been rebuilt: the fort is still in ruins. This temple is mentioned in Ferishta's account of the fourth invasion of India by Sultan Mahmud, A.D. 1008, who sacked it, and again in A.D. 1360 it was plundered a second time by the Emperor Firoz Tughlak. The headquarters of the District were removed from Kangra to Dharm-sala in 1855.

Some 21 m. S.E. of Dharmsala is the pretty little settlement of **Palampur**, the centre of the Kangra tea plantations of 10,000 acres. 9 m. E. again are the interesting temples of Baijnath (see Fergusson's *Ind. Arch.*, 1, 297-301), and from here a road leads to Sultanpur in Kulu (p. 292). 90 m. from Dharmsala, 21 m. S.E. of Kangra, is the famous temple of Javala - Mukhi, picturesquely built up against a rocky cliff, from a cleft in which an inflammable gas issues. This was once one of the most popular Hindu shrines in all N. India, and the autumn fair is still sometimes attended by 30,000 people.

Sultanpur (D.B.), locally known as Kulu or Kulu shahr ("city of Kulu"), is the principal village in the Kulu subdivision of the Kangra District. The Chiefs of Kulu, of whom the Rai of Rupri is the representative, had their residence here before the country was acquired by the Sikhs, from whom the British Government took it over. It is approached either from Simla or from Palampur in the Kangra District. The journey from Simla is a long and tedious expedition, entailing a trying

descent from Narkanda on the Simla-Tibet road into the Sutlej Valley, and a stiff climb over the Jalori Pass (10,000 ft.).

The marches from Simla to Sultanpur will be found on pp. 290-292.

At Bajaura, 9 m. from Sultanpur, is a fine Hindu temple, which is being renovated. Nagar, the headquarters of the Subdivisional Officer of Kulu, is 13½ m. N. of Sultanpur, and two marches (Manali, 12 m., 6300 ft.; and Koti, 6½ m., 8000 ft.) farther on, through fine scenery, is the foot of the climb

over the Rohtang Pass (13,040 ft.) into Lahaul.

The road from Luhri to Jibhi has been realigned, and passes through Ani, a settlement of the Salvation Army, where various industries, agricultural and others, are taught by the resident officers. This road crosses the Jalori Pass at a slightly lower level than the present road. The pass is closed by snow for three months in the year.

The route from Palampur is as follows:—

From	To	Accommodation.	Country.	Distance
Palampur.	Bajinath.	Good bungalow. Kangra District.	Undulating.	miles. 9
Bajinath.	Dhelu.	In Mandi State. Bad bungalow.	Dreary.	13
Dhelu.	Jhatingri.	In Mandi State. Good bungalow.	Flat and then rapid ascent.	14
Jhatingri.	Badwani.	Small Bungalow.	Cross valley.	13
Badwani.	Karaun.	In Kulu. Small bungalow.	Cross valley and then cross Bhubu Pass (9480 ft.).	12
Karaun.	Sultanpur	In Kulu.	Steep descent.	8

In winter the Bhubu Pass is closed by snow, and the road to Kulu lies over the Dulchi Pass (7000 ft.). This road leaves the Dhelu-Jhatingri road not far from Jhatingri, and passes through Hurla, Drang, and Kataula, all in Mandi State, and, crossing the Dulchi Pass, drops on to the Simla-Kulu road at Bajaura.

There is good small-game shooting¹ in Kulu in the winter, and the country holds bear (red and black), ibex, *burrhel*, *thar*, and *ghoral*. Leopards are numerous. These and black bear are regarded as vermin, and a reward is given

for each one destroyed. To shoot big game, other than vermin, a licence, costing Rs.20, must be procured. The number of licences is strictly limited, as is also the number of head that may be shot by a licence-holder. Licences are issued by the Divisional Forest Officer, Kulu: they cover the whole of Kulu, Saraj, Lahaul, Spiti and Bara Bangahal. As the population is scattered, there is often some difficulty in getting labour and supplies; travellers and sportsmen should give ample notice of their visit to the Assistant-Commissioner, Kulu, who will send them detailed information regarding supplies, prices, rates of coolie hire, etc. Much trouble is saved by travelling with mules to carry luggage, and on no account should travellers who have entered

¹ See Colonel Tyacke's *Sportsman's Manual in Kulu, Lahaul, and Spiti*. A booklet of information for travellers, containing the latest rules and hints regarding travelling, has been published, and may be obtained for a small charge from the Assistant-Commissioner, Kulu.

the country with mules dismiss them there, unless they are making a long stay. The Kulu Valley is famous for its fruit orchards, where the finest apples and pears are grown for export to the plains of India and as far as Aden and Burma. An effort is being made to stock the Kulu streams with trout. A hatchery has been established at Nagar. The Kalu trout-rearing has been very successful, and the trout now breed wild in the Biás. Angling-licences are issued by the Assistant-Commissioner, Kulu, for Rs.15 per month, and Rs.35 for the season. The report of an angler last year was most encouraging: the feed is abundant, the trout are numerous, well-grown, and good fighters. Dry-fly fishing is, however, impossible.

346 m. from Delhi is **Lahore Cantonment E.**, formerly Meean Meer station.

349 m. **LAHORE** junction station * (R. good). Lines run N.W. to Rawal Pindi and Peshawar, and S.W. through Sind to Karachi. The railway *workshops* are very extensive, covering 1590 acres, and employing over 11,500 men.

If only a few hours can be devoted to Lahore, a selection of the objects of greatest interest may be made from the following route: The Mosque of Wazir Khan, the Fort, and the Badshahi Mosque should be seen in any case. Then drive to the Queen's Jubilee Statue at the cross-roads (Charing Cross), and driving E. along the Mall, passing (in the order in which they are named), right, the **Masonic Lodge**, a fine edifice, recently built, the entrance to the **Lawrence Gardens**; left, **Nedou's Hotel**; right, the combined **Lawrence and Montgomery Halls**; left, **Government House**, the resi-

dence of the Lieutenant-Governor; left, the **Panjab Club and Aitchison or Chiefs' College**; 3 m. farther on is the desolate old **Meean Meer Lahore Cantonment**. Driving along the Mall W. from Charing Cross, the route passes several good shops; left, **R.C. Cathedral**; left, **Lord Lawrence's Statue**; right, the **Cathedral**; left the **Chief Court** and the **Accountant-General's Office**; several **Banks**, and then, right, the **Telegraph Office**; and left, the **Post Office**. Near a slight turn in the road, on the left, are the **Market**, the **Central Museum**, the **Jubilee Institute** and the **Mayo School of Art**, and the **Town Hall**, and beyond, the entrance to the **Anarkali Gardens**; the tomb of **Anarkali** and the principal **Panjab Government Offices** lie to the S.W. of these, the rest of the offices and the **Senate Hall** of the **University** being situated opposite to the **Museum**. Turning N. from the **Gardens** the **Government College** is passed, right; left, **Deputy Commissioner's Court**, **Model School** and **Government School**. Farther E. is the **King Edward Memorial Hospital**. (This was the old **Mayo Hospital**. It has been vastly improved and extended, at a cost of above 6 lakhs of rupees.) Proceeding round the W. side of the city the **Cemetery** is passed left, and a little farther on the road divides—that left leading to **Shahdara** (p. 321) across the bridge of boats, and that right passing the **Badshahi Mosque**, the **Fort**, and the N. of the city to the railway station.

In the new **Public Buildings** of Lahore an attempt has been made to adopt Hindu and Muhammadan styles of architecture to the requirements of modern buildings. The success of these was largely due to the late Mr J. L. Kipling, C.I.E., Principal of the **School of Art**; R. B. Ganga Ram, C.I.E., **Ex-Engineer**; and to the present

Principal of the Art School, Sardar Bahadur Bhai Ram Singh, M.V.O.

Lahore¹ is a municipal city, capital of the Panjab headquarters of the Panjab Government, the seat of an Episcopal See, and headquarters of a Division and District of the same name (population, with Mian Mir, 228,687. Lat. $31^{\circ} 34'$, long. $74^{\circ} 21'$). Tradition says that Lahore was founded by Loh, the elder son of Rama; no mention of it, however, is made by Alexander's historians, and no Græco-Bactrian coins are found among the ruins. It seems to have been governed by a family of Chauhan Rajputs, from whom it was wrested by Mahmud of Ghazni, whose famous slave, Malik Ayaz, was Governor here. It did not, however, attain to magnificence till the rule of the Mughals. Akbar enlarged and repaired the fort and surrounded the town with a wall (which has been demolished). Jahangir often resided at Lahore, and during his reign Arjan Mal, Guru of the Sikhs, compiler of the *Adi Granth*, died in prison here. The mausoleum of Jahangir is at Shahdara, 4 m. from Lahore (see p. 321). Shah Jahan built the palace of Lahore, and Aurangzeb built the great mosque, but in his time the city began to decline, and was much ruined by the invasions of Ahmad Shah Durani. Of its glory in its prime the proverb ran: "Isfahan and Shiraz united would not equal the half of Lahore." For half a century after the Mughal capital was utterly effete, vigorous Muhammadan governors, Abdul Samand Khan, Zakaria Khan (1717-38), Yahia Khan (1738-48), the son of the latter, and nephew of the Delhi Wazir Kamar-ud-din Khan, and Mir Mannu, son of the last (1748-52), maintained themselves in the Panjab, and fought with the Sikhs,

and submitted to the Persians under Nadir Shah, and the Afghans under Ahmad Shah. When the widow of Mir Mannu, Murad Begam, was treacherously entrapped by the Wazir Ghazi-ud-din, Adina Beg (1755-8) was made Governor of the Province; and it was his summoning the Mahrattas to protect him against the Sikhs that ultimately led in 1761 to the Battle of Panipat, in which Ahmad Shah utterly crushed the Hindu forayers of the South for the moment. From 1775 onwards the Sikhs were the real rulers of Lahore.

Under Ranjit Singh, Lahore regained some of its former splendour, and since the period of the British rule, which commenced in 1849, buildings have greatly multiplied. The modern city covers an area of 640 acres (the old wall surrounding it has been removed). The moat has been filled in and has been converted into fine lawns, which encircle the city on every side except the N.W. A metalled road runs round the city, to which it gives access by thirteen gates.

Within the ramparts that surround the city, in the N.W. corner, is the citadel, usually called the fort. The Ravi River, flowing W., once washed the walls of the city, and in 1662 made such encroachments as to necessitate the construction of a massive embankment 4 m. long. It now sweeps round Lahore and passes to the S. at about 1 m. W. of the city.

The Lawrence Gardens, which cover 157 acres, contain a large variety of trees and shrubs of different species. The visitor will remark the *Pinus longifolia*, the Australian gum-tree, and the carob-tree of Syria. There is also a menagerie at the W. end, and a cricket ground at the E. end.

At the N. side is the Lawrence Hall, built in memory of Sir John

¹ Thornton's *Lahore* and Syad Muhammad Latif's *Lahore* give very full accounts of the place.

Lawrence in 1862, fronting the Mall; and the **Montgomery Hall**, built in 1866, in memory of Sir R. Montgomery, facing the central avenue of the gardens. A covered corridor connects them. The Montgomery Hall contains portraits of Sir Henry Lawrence, Sir John Lawrence, and other Lieutenant-Governors of the Province, and celebrated Englishmen, including Brigadier-General John Nicholson.

Government House stands on the opposite side of the Mall, N. of the Lawrence Gardens. It was the tomb of Muhammad Kasim Khan, cousin of the Emperor Akbar. He was a great patron of wrestlers, and his tomb used to be called *Kushtiwalla Gumbaz*, or Wrestler's Dome. The present Lieutenant-Governor of the Panjab is Sir M. F. O'Dwyer, K.C.S.I.

E. of this is the **Panjab Club**, and E. again the **Aitchison Chiefs' College**, which owes its inception to Sir C. U. Aitchison (Lieutenant-Governor, 1882-7), and of which the foundation-stone was laid by Lord Dufferin in 1888, intended for the education of the sons of the Native Princes and leading Chiefs of the Panjab. The Central Building is a very fine one, and the number of students varies from 80 to 100.

The **Jubilee Statue of Queen Victoria** in the centre of the Mall, at the spot known as Charing Cross, is a pleasing one. The **R.C. Cathedral** is a very fine building; the **Anglican Cathedral** is a large red brick Gothic church, erected in 1884-7. Beyond is an ineffective statue of Lord Lawrence, Chief Commissioner and Lieutenant-Governor of the Panjab, 1853-9. The **Chief Court** is a pleasing structure built in the late Pathan style of the 14th century. The **Telegraph Office**, the **Post Office**, and the **Bank of Bengal** are all

handsome buildings. Adjoining the last is the **American Presbyterian College**.

The **Central Museum** is perhaps the most effective of all the public buildings in Lahore; the foundation-stone of it was laid by H.H. the Duke of Clarence in February 1890. Later a white marble entrance façade was added, but it cannot be said to be in keeping with the rest of this fine building.

Opposite this is the **New University Hall**, and in front of it is the famous gun, "Kim's" gun, called the *Zamzama*, "Hummer," or *Lion's Roar*. The Sikhs called it the *Bhangianwali Top*—that is, the cannon of the Bhangi confederacy. The gun was made by Shah Wali Khan, Wazir of Ahmad Shah Durani, and was used by him at the Battle of Panipat. After Ahmad Shah left India it came into the hands of the Bhangi Misl, and Maharaja Ranjit Singh eventually got possession of it, and used it at the siege of Multan in 1818. It was then placed at the Delhi Gate of Lahore until 1860, when it was removed to its present site. The Persian inscriptions on it give the date of casting, 1762 A.D.

The Lahore Central Museum is well worth a careful inspection. It contains an excellent collection of antique sculptures, coins, Kan-ga and Mughal paintings, the various arts and crafts of the Province, and a unique collection of textile manufactures and some of the raw products of the Panjab. An effort has been made by the Curators at different times to show the processes of manufacture of the various crafts in the same cases as the finished articles, and this will be continued. The glory of the Lahore Museum is the collection of Græco-Buddhist sculptures which were excavated from various sites in the Peshawar district and surrounding territories,

the ancient Gandhāra country. These sculptures are remarkable in that they were largely the work of Græco-Bactrian sculptors, and, consequently, show a very strong Greek, or rather Hellenistic influence, which is especially noticeable in the well-balanced grouping of the figures and the treatment of the drapery.¹ The subjects, however, except for some decorative details, are purely Indian, the bas-reliefs illustrating scenes of Buddha's life. It is not a little curious that the Buddha image itself is, in all probability, a creation of the Græco-Bactrian artists of Gandhāra. The flourishing period of the Græco-Buddhist school is believed by the best authorities to fall in the 1st century A.D., though the most classical specimens are probably earlier. The visitor should note particularly the *stīpa* drum of Sikri, which occupies the centre of the archaeological gallery. It is carved all round with various scenes of Buddha's life, including that of his being fed by a monkey. The Sikri sculptures were excavated by the late Sir Harold Deane, the first Chief Commissioner of the Frontier Province. They include the statue of Gautama Buddha emaciated after his long fast, which is striking through its almost repulsive realism. Among inscriptions may be seen that of Takht-i-Bahai, dated in the reign of King Gondophares, at whose court St Thomas, the Apostle of India, lived, and who, according to tradition, put the Apostle to death.

In the archaeological department² there may be seen, also, the

bases of two pillars brought by General Cunningham from Shah ki Deri, probably the ancient Taxila; numerous Buddhist sculptures from the Yusafzai country and elsewhere, in which the classical influence is plainly discerned; a Buddhist pillar about 9 ft. high, with a huge head projecting on one side, dug up near Jhelum; also two old brass cannon found buried in a mound of Anandpur, in the District of Hoshiarpur, thought to be of the time of Guru Govind Singh. There are also two relics of the prehistoric age—two finely-finished celts of porphyritic greenstone, found in Swat.

The collection of jewellery, both antique and modern, including specimens from the Trans-Indus territory, is very good, and shows a power of design and decoration well worth studying; and the collection of hookahs of all periods and in all materials is contained in another interesting case. There is also a comprehensive collection of musical instruments gathered together by the late Mr Kipling, which show great beauty of design and execution, and a good collection of Indian arms and armour, among which a dagger fancifully decorated with pearls running in grooves in the blade, and a sword, the hilt and scabbard of which are decorated with Niello work, are particularly noticeable. Other cases contain specimens of pottery and Panjab glass, and of the *Koftigari* work of Gujarat and Sialkot; cups and ornaments of vitreous enamel from Bahawalpur; silver inlaid in pewter and perforated metal work from Delhi.

There are good specimens of the silk manufactures of Bahawalpur and Multan, and the satinettes are excellent. The embroideries called *shishadar phulkaris*, of soft floss silk on cotton, interspersed among which are small bits of glass, are special to the Panjab; the rude idols, hideously painted,

¹ The standard work on these sculptures is A. Foucher's *Art gréco-bouddhique du Gandhāra*, vol. 1, Paris, 1905.

² See *Descriptive Guide to the Department of Archaeology and Antiquities, Lahore Museum*, by Percy Brown. Illustrated. Lahore, 1908. 82s. An illustrated catalogue of the Græco-Buddhist (or Gandhāra) sculptures by Mr H. Hargreaves should be asked for.

were worshipped by the ladies of the Sikh Court. There are choice examples of Kashmir shawls, both woven and hand-embroidered, and some in which the two processes are combined, and various specimens of that interesting process called "tie-dyeing," which gives curious patterns, and shows the method of manufacture. There have recently been added miniature model groups showing the workers engaged in making pottery, glass, metal ware, lacquer work, turning, etc., which are excellently grouped and painted. There are also collections of the leathern ware of the Panjab; of ethnographical heads by Messrs Schlagentweit; lay figures habited in the costumes of the people of Lahaul, Spiti, and Ladakh; and Tibetan curiosities, such as prayer-wheels.

In the mineral section will be seen the model of the *Koh-i-Nur* made for the Exhibition of 1851. According to the Hindus, this diamond belonged to Karna, King of Anga, and according to the Persians, it and its sister diamond, the Darya-i-Nur, or "Sea of Light," were worn by Afrasiab.

The numismatic section, which is particularly good, almost unique, for the period of Greek rule in Bactria and the Panjab, and contains also Mughal and Indian coins of great interest, can be seen on application to the Curator. The coin catalogue is by Mr R. B. Whitehead, I.C.S., Clarendon Press, 1914. Attention is also drawn to the specimens of jewellery from the Trans-Indus country, published by Sir J. H. Marshall in his Report for 1902-3 (pp. 185-94).

The Tibetan collection includes some remarkable specimens of Lamaistic temple banners. Finest among them is the embroidered banner, showing Padma-sambhava (Lotus-born), who converted Tibet to Buddhism. It was purchased for the sum of £100. One

of the painted banners depicts the "Wheel of Existence" and other scenes of Buddha's life from his conception and birth till his Nirvana and the worship of his relics.

Among minor antiquities should be noted a Buddha statuette of brass inlaid with silver and copper from Fatehpur, in the Kangra District. It belongs to the 6th century A.D. (see *Archæol. Survey, Ann. Rep.*, 1904-5, pp. 107-9).

There are also specimens of the mineral resources of the country. Among them will be seen iron ore from Bajaur. It is a magnetic oxide of singular purity. Antimony and lead are also shown, and gold found in the sands of the Panjab rivers in small quantities. Specimens of rock-salt of two kinds—one from the hills between the Jhelum and the Indus, and the other from the hills beyond the Indus—are exhibited too.

The Mayo School of Art attained considerable eminence under the late Mr J. Kipling, C.I.E., Mr Percy Brown, and Sardar Bahadur Ram Singh, M.V.O., a pupil of Mr Kipling, and now Principal. The last-named is well known for the fine carved work which he executed for Her Majesty Queen Victoria and H.R.H. the Duke of Connaught, and he was also responsible for many fine buildings in Lahore. The School of Art has always been a centre of craft work in the Panjab, and the work of its staff and students has been extensively utilised by Government in decorative work of all kinds all over the Province. It has been fortunate to have as Principals men sympathetic with the indigenous arts of the Province, and the chief aim of this institution is still to encourage and improve these arts, with which object new workshops have been required to enable the better teaching of cabinet-work, metal-work, jewellery, cotton-printing,

and pottery, and the staff required strengthening by engaging experts in these crafts. One department of the School is devoted to the training of teachers of drawing and craft work, and teachers from this department are sent all over the Panjab and to other parts of India.

W. of the new Museum is the **Town Hall**, opened by H.R.H. the late Duke of Clarence in 1890, and S. of this is the **Panjab Library**, said by some to have been built by Wazir Khan, by others by Ilahi Bakhsh. It is a handsome building, with four white cupolas, and contains many valuable books.

Not far off, on the E. outskirts of the Anar Kali Bazar, is the Nila Gumbaz, or Blue Dome, the tomb of Abdul Razak, a saint of the time of Humayun. Farther S., near the Presbyterian church, is the shrine of another Muhammadan saint called **Mauj-i-Darya**. Over the door is a Persian inscription which says it is the tomb of Saiyad Muhammad Shah **Mauj-i-Darya**, son of Nuru'llah, who was a spiritual guide in the time of Akbar.

The **Tomb of Anar Kali**, Pomegranate Blossom (a name given to a favourite lady in the harem of Akbar, who was also called Nadira Begam, or Sharfunnissa), is an octagon cased in plaster and surmounted by a dome. It was for many years the church of the Civil Station (St James), but it is now used as the Secretariat Library. The cenotaph, now placed at the E. end of the central chamber, is of the purest white marble, and the ninety-nine names of God carved on it are so exquisitely formed as to surpass anything of the kind in India. On the side, below the names of the Deity, is written *Majnun Salim-i-Akbar* (the enamoured Salim, son of Akbar), Salim being the name of Jahangir. On the W. side is

a date, above the words "In Lahore," corresponding to 1615, which is probably the date of the building of the tomb. The story is that Anar Kali was beloved by Salim, and was seen by Akbar, his father, to smile when the Prince entered the harem. As a punishment for this it is said that she was buried alive, and the pathetic distich engraved on her sarcophagus certainly indicates that Salim was her lover :—

"Ah gar man baz binam rue yar-i-klhwesh ra,
Ta kiamat shukar goyam Kardagari-
klhwesh ra."

"Ah, if I could again see the face of my beloved,
To the day of judgment I would give
thanks to my Creator."

In front of the Civil Secretariat Office, adjoining the tomb, is a cross to the memory of Sir Donald M'Leod, Lieutenant-Governor, 1865-70.

The Government College buildings rise finely on the right side of the road from Amarkali to the city; the Convocation meetings of the Panjab University are held in the great Hall of the College, and there is a large boarding-house attached to it.¹ On the opposite side of the road are the District Courts, which possess more architectural merits than buildings of this class usually do in India. Farther back to the W. from here is the noted shrine of **Data Ganj Bakhsh**, a saint of the time of Mahmud of Ghazni. Passing round the W. side of the city a fine view is obtained at the N.W. corner of the great mosque and the Sikh sacred places to the N. of it and the fort rising above it. The first of the shrines is that of **Guru Arjan**, the fifth Guru, and compiler of the *Adi* (original) *Granth*. The *Granth* is read here

¹ The Oriental College is also included in these. It contains 90 students, and the Government College 200.

daily in a huge volume over which attendants reverently wave *chauris*. According to Sikh legend, he disappeared in the Ravi on this spot, upon which Maharaja Ranjit Singh, accordingly, built this memorial. Between this and the Hazuribagh is the Samadh, covering the ashes of Maharajas Ranjit Singh, Kharak Singh, and Nau Nihal Singh, a glittering white building rather out of keeping with the solemn mosque. It faces the W. wall of the fort, and is a square stucco building, restored in part in 1840, on a high platform of marble. The ceilings are decorated with traceries in stucco inlaid with mirrors. The arches of the interior are of marble, strengthened with brick and *chunam*, and clamped with iron, by order of Sir D. M'Leod, when Lieutenant-Governor. In the centre is a raised platform of marble, on which is a lotus flower carved in marble, surrounded by eleven smaller flowers. The central flower covers the ashes of the great Maharaja; the others those of four wives and seven concubines who became *satis* with his corpse.

In the centre of the Hazuribagh is the *Barahdari*, a marble pavilion built by Ranjit Singh from the spoils of Mughal edifices. The patched nature of the structure will be evident from the use of various fragments of inlaid pavements, and from the balustrade round the roof, which is partly made up of halves of pierced window-screens. The tradition that the whole pavilion once formed the superstructure of the mausoleum of Jahangir can easily be proved to be without any foundation. The total aspect of the *Barahdari* is not unpleasing, notwithstanding its mixed style, and its historical associations render it of special interest. It is frequently mentioned by European travellers

who visited Lahore during the Sikh period. It seems that William Moorcroft was put up here in May 1820, in the reign of Ranjit Singh, while Captain Leopold von Orlich was received in the Hazuribagh in audience by Sher Singh in January 1843.

Right opposite the flight of stairs leading up to the Badshahi Masjid is one of the two main gates of the Lahore Fort,¹ called the Hazuribagh Darwaza. It is sometimes designated by the name of Akbari Darwaza, the Gate of Akbar, but it is evident that the present gate cannot possibly have any connection with that Emperor. It is a late structure, apparently built at the same time as the Badshahi Masjid, and renewed by the Sikhs.

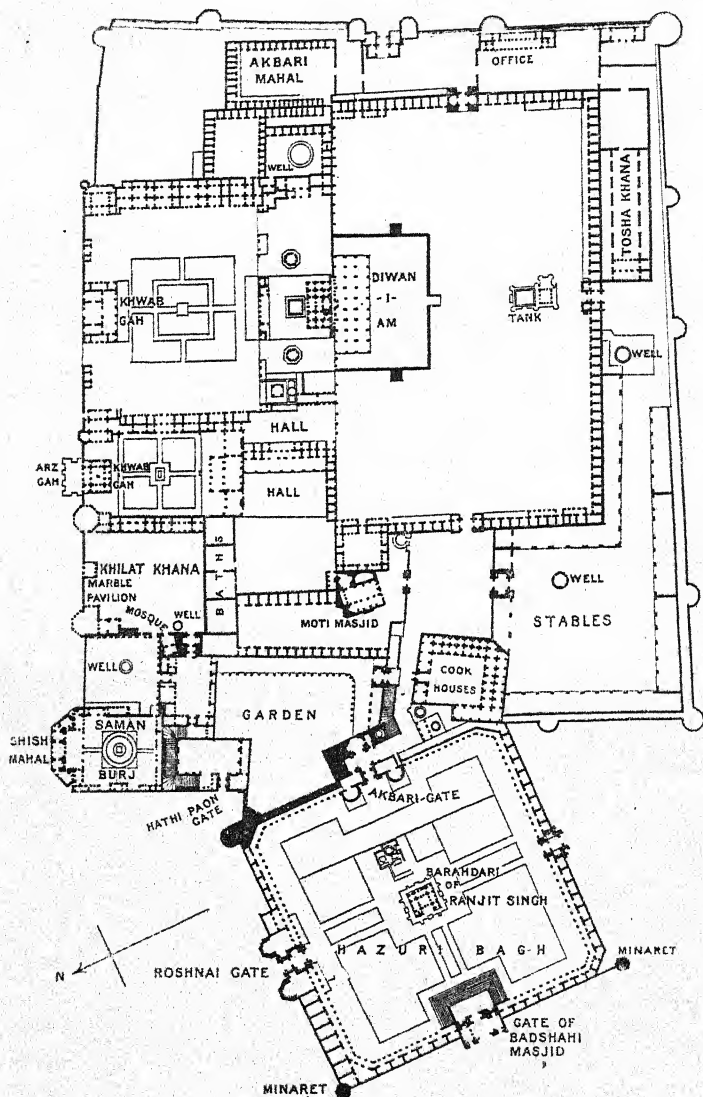
The Hazuribagh Darwaza, as well as the Masti Darwaza (the other main gate which gave access to the fort from the side of the city), has been closed since the British occupation. The fort is now entered through a modern postern dating from the year 1853, where a register of visitors is kept. Behind it rises the Hathi Pol, or Elephant Gate,² which once formed the private entrance to the apartments occupied by the Emperor and his ladies. The gate itself, as well as the adjoining curtain wall, is gorgeously decorated with tile mosaics, which are continued all along the W. and N. faces of the fort wall.³ Though this tile work has suffered irreparable damage owing to neglect and the repeated bombardments during the Sikh period, it still retains its

¹ The present account of the Lahore Fort is based on Dr Vogel's *Historical Notes on the Lahore Fort* (*Journal, Panjab Historical Society*, 1911, 1, 38-55).

² The old elephant route into the fort is to be reopened. Visitors following its windings to the left arrive first at the Shish Mahal Court, and then, passing the Mughal buildings, leave the fort at the Diwan-i-khas and pass under the walls to the gate of entrance.

³ On these tile mosaics, vide *Journal of Indian Art and Industry*, vol. 14, Nos. 113-17.

THE FORT, LAHORE



brilliance of colour, and fully deserves a close inspection. This so-called *kashi* work was a favourite mode of decorating brick buildings in the days of Shah Jahan, and is by no means uncommon in the buildings of his reign found at Lahore. But the decoration of the fort wall is unique in that in several of the panels figures of living beings have been introduced. Many panels depict elephant fights, the favourite recreation of the Mughal Court. The elephants are always full of vigour, but the same cannot be said of the camels and horses. The spandrels are decorated with winged figures of Persian fairies (*pari*) in floating robes, carrying a fan or a lamb or holding a horned demon with hands tied in front. The decoration on the wall of the Saman Burj is particularly fine, and special attention may be drawn to the two panels depicting a camel fight, and one, unfortunately much damaged, showing four Mughal horsemen playing polo. The goals, consisting of two upright slabs, are clearly shown on both sides of the panel. It should be remembered that polo, or *chaugan*, as it is called in Persian, was a favourite sport at the Court of the Great Mughals. On the N. wall most of the decoration has gone, but beneath the Khwab-gah of Jahangir may be seen a pair of particularly fine blue dragons (the dragon, or *azhdaha*, was one of the emblems carried in front of the Emperor), whilst another panel shows the familiar scene of the goat and monkey-man.

The tile work on the N. wall belongs, perhaps, to the reign of Jahangir, but that on the Saman Burj and on the W. wall may be safely ascribed to the beginning of Shah Jahan's reign. A Persian inscription over the Hathi Pol records that Shah Jahan built a Royal Tower (*Shah Burj*) in A.D. 1631-2. The *Shah Burj* in ques-

tion is the same which is now known as *Saman Burj*.

Before entering the palace proper it may be noticed that we must distinguish three distinct building periods—the early Mughal palace, completed by Jahangir in 1617-18; Shah Jahan's palace, completed in 1631-2; and the tasteless and insignificant additions due to the Sikhs, who restored the palace after a period of neglect. The military occupation since 1849 has done great harm, which of late years has been partly remedied, mainly through the influence of Lord Curzon.

From the *Hathi Pol* two roads lead up to the palace buildings. The ancient road, now closed to the public, starts to the N. (left) of the gate, and by a twisted flight of steps leads up to a courtyard which, by a marble gate, communicates with another court adjoining the square of the *Saman Burj*. It was once the private entrance to the imperial palace. The modern road is a ramp of military construction which takes the visitor to the W. end of what was once the big quadrangle of the Diwan-i-'Am. The cloistered row of buildings forming this square were demolished after the military occupation, except a block in front of the Pearl Mosque, or *Moti Masjid*. This will convey some idea of what the original cloister must have been like. Over the gate there is a marble slab with a Persian inscription which records the completion of the early Mughal palace by Ma'mur Khan in the twelfth regnal year of Jahangir—i.e., the year 1027 of the Hijra (A.D. 1617-18).

This gate and the little courtyard behind give access to the Pearl Mosque, or *Moti Masjid*, apparently the earliest of the four buildings of the name.¹ It is an

¹ The Pearl Mosque in the Agra Fort was built by Shah Jahan, that in the Delhi Fort by Aurangzeb, and that at Mahrauli, or Old Delhi (Kutb), by Shah Alam Bahadur Shah.

exquisite little edifice of white marble, with a court in front. The Sikhs converted it into a treasury, and it was continued to be used as such until it was rescued by Lord Curzon, who ordered its restoration, which was carried out in 1903-4. The variety of ceiling construction in the various compartments of the prayer chamber should be noticed.

The *Diwan-i-'Am* itself occupies the centre of the fort. Until 1903 it was used as a barrack, and it still bears traces of military occupation, though all modern excrescences have since been removed. It consists of two distinct buildings. The smaller of the two at the back (N. side), which consists of rows of small apartments, is the older portion which existed in the reign of Jahangir. The open hall in front, supported on four rows of ten sandstone pillars, was added by Shah Jahan in the first year of his reign, so that his courtiers, when attending the daily public audience, might be sheltered against sunshine and rain. Though one of the first creations of Shah Jahan's reign, it is decidedly disappointing from an architectural point of view. The entire superstructure is modern, and most of the buildings appear to have been reconstructed, perhaps during the Sikh period. The most interesting part is the throne balcony, or *jharokha*, in which the Emperor used to make his daily appearance. Between the front row of columns may be noticed remnants of the white marble railing, whilst along the platform in front of the hall the red sandstone railing is partly preserved. These railings served the purpose of grouping the nobles, when attending court, according to their rank and dignity.

The historical associations of the *Diwan-i-'Am* are many. It was probably here that Manucci

rejoined Dara Shikoh after the Battle of Samugarh.¹ Manucci has also an extraordinary story about some golden pigs which were made by order of Jahangir to annoy the Mullahs, for, when he awoke, he would rather see these pigs than the face of a Muhammadan. After his death Shah Jahan had them buried "in front of the royal seat in the fortress of Lahore." The whole story sounds rather like a yarn. In the days of Ranjit Singh the *Diwan-i-'Am* was known as *Takht*—i.e., the Throne. It was here that after Ranjit Singh's death his body lay in state. This is evident from the account of his court physician, Dr Martin Honigberger, who gives a most graphic description how in the great courtyard he met one of the four Queens who were to be burnt with the remains of their royal husband.²

At the back (N.) of the *Diwan-i-'Am* is the oldest portion of the Lahore palace. It is usually designated as the Quadrangle of Jahangir, although it is not impossible that these edifices go even back to the reign of Akbar. They consist of two rows of buildings facing each other, with sandstone porches characterised as early Mughal by eaves supported on ancient brackets. The carved work on the two slightly-projecting edifices at the ends of both rows is particularly fine. The centre of the N. side of the quadrangle is occupied by the *Bari Khwabgah*, which is ascribed to Jahangir, but is evidently modernised to a large extent. It is intended to convert this building into an armoury, and display in it the collection of ancient weapons now kept in one of the buildings of the *Saman Burj*. The central portion of the quadrangle was once occupied by a

¹ Nicolao Manucci, *Storia do Mogor*, translated by William Irvine, London, 1907, vol. 1, pp. 158, 309.

² Honigberger, *Früchte aus dem Morgenlande*, p. 111 (English translation, p. 97).

square tank and ornamental garden, but since 1849 these have made place for some ugly cook-houses and other structures. At present most of the buildings of Jahangir's Quadrangle are still utilised for military purposes, but it is hoped that ere long they will be vacated and made over to the Archaeological Department.

The smaller square adjoining Jahangir's Quadrangle on the W. has preserved more of its original character. It is occupied by a formal garden, with a platform and fountain in the centre. The open pavilion on the N. side of this garden is the *Chhoti Khwabgah*, or Lesser Bedchamber, which may be safely ascribed to Shah Jahan. It is an elegant pavilion of white marble supported on five rows of five pillars carrying scalloped arches. The archways on the N. are closed with pierced screens. An eave, supported on brackets, runs along the four sides of the building. The roof has a parapet with marble facing decorated with a graceful border of *pietra dura*. The interior is paved with variegated marbles, and the centre is occupied by a fountain basin scalloped out and inlaid with semi-precious stones. Most of the inlay, however, has disappeared. For more than forty years the *Chhoti Khwabgah* was used as a garrison Church. It was restored at the instance of Lord Curzon. The marble ceiling is modern.

Looking down from the *Khwabgah*, there is seen at the foot of the fort wall a ruined structure. It is the '*Arzghah*—i.e., the place where in the morning the nobles assembled to pay their respects to the Emperor.

The next court, called *Khilai Khana*, offers nothing remarkable. In the N.W. corner of the adjoining square there is an open pavilion which dates from the reign of Ranjit Singh, and was used by him as a *Kachahri*, or Court

of Justice. Its general appearance is not ungraceful, but its Sikh origin is clearly indicated by certain details—such as the combination of white marble and red sandstone brackets, and that of marble trellis screens with red sandstone posts in the ornamental railing which is placed on the roof of the building. The curious frescoes on the N. wall, relating to the legend of Krishna, are evidently the work of one of Ranjit Singh's court painters.

The last court to be seen is that which, occupies the N.W. corner of the palace, and is known by the name of *Saman Burj*¹ (p. 315). This appellation, however, dates only from the Sikh period, whereas the original name was *Shah Burj*, or Royal Tower. The inscription over the *Hathi Pol*, which records the completion of the *Shah Burj* in the 4th year of Shah Jahan's reign (A.D. 1631-32), refers to this group of buildings.

First of all will be noticed the large hall, now known as *Shish Mahal*, or Palace of Mirrors, which occupies the N. side of the square. It was here that in March 1849 the sovereignty of the Panjab was assumed by the British Government, as is recorded on a marble tablet let into the wall. The *Shish Mahal* is built on a semi-octagonal plan. Its largest side, facing the square, has a row of double pillars of inlaid white marble, forming five archways surmounted by an eave of the same material. Interiorly the spandrels over the arches are decorated with *pietra dura*, which has marvellously escaped the vandals who have mutilated this kind of work wherever it was found. The graceful vine pattern over the two outer arches deserves special notice. The main room, a rectangular hall of noble dimen-

¹ The word *saman* is an abbreviation of Arabic *musamman*, meaning "octagonal." The usual rendering of *Saman Burj* by "Jasmine Tower" is wrong.

sions, has a dado of white marble, while the upper portion of the walls and the ceiling are decorated with mosaic of glass laid in gypsum, which accounts for the name of Palace of Mirrors. It should be noticed that this decoration belongs to two different epochs. The ceiling, with its prevailing aspect of subdued gilt, formed undoubtedly part of the original edifice. It is rich without being gaudy. The wall decoration, on the contrary, is decidedly vulgar, and the introduction of sherds of blue and white china bears testimony to a childish taste. It is typical Sikh work. The central hall is surrounded by a row of nine smaller rooms decorated in the same fashion. In the largest of these rooms, at the back of the main hall, will be seen a very fine marble screen of trellis-work. The roof of the *Shish Mahal* is encumbered with a curious medley of structures dating from the Sikh period.

The very ornamental marble pavilion, with "Bengali" roof, which stands on the W. side of the square, is called *Naulakha*—a name which is explained from its having cost nine lakhs of rupees to build. Probably the name and the supposed tradition are comparatively modern. The building has been wrongly ascribed to Aurangzeb's reign; it undoubtedly belongs to the beginning of Shah Jahan's reign, like the other buildings of the *Saman* (or *Shah Burj*). The *pietra dura* decoration of the marble dado is entirely in the style of his reign, but the inlay in the panels above the dado is of a very different type, and reminds one of some of the work found on the Golden Temple at Amritsar. The Sikhs have also meddled with the original decoration, as in one of the dado panels there appears a "Chinese" cloud converted into a bird. The painting and mirror work of the wooden ceiling is also certainly due to the Sikhs. The

roof must once have been covered with sheet copper and pinnacles of the same metal. It is unknown when it was removed.

The remaining buildings of the *Shah Burj* do not offer anything remarkable. Those on the S. side of the square are now used as an armoury, but it is intended to transfer the collection of ancient weapons to the *Bari Khwabagh*. The courtyard is paved with grey and variegated marble, and the centre is occupied by a reservoir. In the N.W. corner of the court there is a stone floor, measuring 9 ft. 6 in. square, which does not belong to the original pavement. The tradition that it was taken by the Sikhs from the platform in front of the gateway of the *Badshahi Masjid* is untrue. It belonged originally to a mansion in the city, and was purchased by Ranjit Singh. An apartment in the N.E. corner of the square is indicated as Sher Singh's bathroom. It belongs to the original palace, but was altered by the Sikhs to suit the requirements of a Hammam.

Leaving the Hazuribagh by the S. gate, and turning E. past the reservoir of the Water-works, the *Sonehri Masjid*, or Golden Mosque, is reached. This has three gilt domes, and was built in 1753 A.D. by Bikhari Khan, a favourite of the widow of Mir Mannu, a lady who governed Lahore a short time after her husband's death. He is said to have displeased the lady, whose female attendants beat him to death with their shoes. The situation of this mosque at the junction of two streets is picturesque.

In a courtyard behind the mosque is a large well, with steps descending to the water. It is said to have been dug by Arjan, the fifth Guru.

A street with some fine balconies leads E. again from here to a *chauk*

or square, where is the very beautiful Mosque of Wazir Khan. It was built in 1634 by Hakim 'Alau-din of Chiniot, Governor of the Panjab under Shah Jahan. The brick walls are covered with inlaid work called Nakkashi, a kind of mosaic of glazed tiles, lately renewed where necessary. The colours of the tiles are burnt in, and they are set in hard mortar. The yellow ground of the tile-work is extremely effective and beautiful. Over the noble entrance is written in Persian: "Remove thy heart from the gardens of the world, and know that this building is the true abode of man." It was completed in 1634 A.D. The architect was Hidayat-ullah, the faithful servant of Wazir Khan. In the centre front of the mosque is the Moslem creed, and in panels along the façade are beautifully written verses from the Koran. From the gallery round the minarets, about 3 ft. broad, there is a very fine view over the city, which is truly Oriental and picturesque. Beyond the *chauk* is the Delhi Gate of the city, from which the Landa Bazar now leads to the railway station. The magnificent palace of Dara Shikoh and the great Tripulia Bazar lay between the city and the station; and the houses and gardens and tombs of the nobles extended along the Ravi as far E. as Shalimar. The ruined tomb of Mir Mannu adjoins the open space W. of the railway station; the mosque E. of the station, now used as a railway office, was built by a foster-mother of Shah Jahan in 1635.¹

The picturesqueness of the old town must appeal to every one, but to artists it will be found of especial interest. The balconies and projecting oriel windows of the irregular brick houses, together with the variety and colour of the cos-

tumes of the people, form a striking picture. The most effective corners will be found at the N. ends of the streets leading from the Mori and Lohari Gates. In front of the latter the Anar Kali Bazar runs for $\frac{3}{4}$ m. down to the Panjab Museum. To the E. of it lie the King Edward Memorial, with the Albert Victor Memorial wing, the Lady Aitchison Female Hospital, and the Lady Lyall Nurses' Home. A college for girls is being started in memory of the visit of Queen Mary.

Near the S.W. corner of the Civil Station is the Chauburji (Four Towers) gateway. This beautiful but ruined building, which led to the garden of Zebunnissa Begam, a daughter of the Emperor Aurangzeb, is faced with blue and green encaustic tiles. This lady, who died in 1669 A.D., long before her father, and who was a poetess under the name of Makhfi (Hidden), is buried at Nawar Kot, 1 m. S. from this garden.

Excursions from Lahore.

The Shalimar Gardens are 5 m. E. from the railway station. About half-way to them is the gateway to the Gulabi Bagh, or Rose Garden, laid out in 1655 by Sultan Beg, Admiral of the Fleet to Shah Jahan. The Nakkashi work of coloured tiles on the gate is very beautiful, and hardly inferior to that on Wazir Khan's Mosque. On the gateway is inscribed in Persian:—

'Sweet is this garden; through envy of it
the tulip is spotted,
The rose of the sun and moon forms its
beautiful lamp."

Close to this is the tomb of Sharfunnissa Begam, sister of Zakaria Khan, with paintings of cypress-trees.

There are many dargas and gardens near this building, to

¹ The mosque of Dai Anga was restored to the Muhammadans at the instance of Lord Curzon.

which on holidays crowds of people go on pilgrimage. Between them and the river is the village of Begampur. The ruined octagonal tomb to the E., known as the Bagga Gumbaz, or White Dome, is the tomb of Yahia Khan, and not far off are the mosque and grave of Zakaria Khan and his father, in a garden of the former, whose palace was at this place. Nearer the river again is the garden tomb of Shah Bilawal, a saint honoured by Shah Jahan, where Maharaja Sher Singh was murdered in 1843.

Opposite to the Gulabi Bagh, across a field on the S. side of the road, is the Tomb of 'Ali Mardan Khan, the celebrated engineer, who also created the Shalimar Gardens. Its lofty archway retains traces of exquisitely coloured tiles. 50 yds. S. of this is the octagonal tomb, built of brick, now much ruined.

The Shalimar Gardens were laid out in 1637 A.D. by order of Shah Jahan. They are divided into three parts, in tiers of different levels; the highest was known as the Farhat Bakhsh, and the two lowest as Faiz Bakhsh. The whole extent is about 80 acres, surrounded by a wall, with a large gateway and pavilions at each corner. Canals traverse the garden, and there is a tank in the centre with an island and a passage across to it. There are one hundred small fountains in the first garden, and double that number in the tank. The trees are chiefly mangoes, and the garden is laid out in monotonous square beds. Once, when the cement was intact and the frescoes new, it must have been a very pretty place; but now it strikes the eye as rather decayed and shabby.

On the opposite side of the road are two other gardens, the *Sindhanwala* and *Misir Brij Lal's*; to the E. is the fine garden of *Jama-*

dar Khushhal Singh, and across the road to the N.E. that of *Lehna Singh*.

The Lahore Cantonment, formerly *Meean Meer*, lies 5 m. to the S.E. of the Civil Station. It is the headquarters of the 3rd Army Division. Six of the nine Army Divisions, it may be noted, are in the corner of India, N.W. of Lucknow.

The Cantonment, built in the middle of graveyards and upon them, has always been very unhealthy; the dust and heat of the place in summer render it one of the most unpopular in India.

About $\frac{1}{2}$ m. to the N.W., on the right of the road from the railway station to the Cantonment, is the *Shrine of Meean Meer*, a saint from whom the Cantonment has its name, and who was honoured by the Emperors Jahangir and Shah Jahan, his real name being *Muhammad Mir*. It stands in the centre of a quadrangle 200 ft. sq., on a marble platform. Over the entrance are an inscription in Persian and the date=1635 A.D. The left side of the enclosure is occupied by a mosque.

The disarmament of the Native Regiments at *Meean Meer*, on 13th May 1857, by Brigadier-General Corbett, was perhaps the most important of all the steps taken at the commencement of the Mutiny to secure the Panjab and ensure the taking of Delhi. It was carried out quietly and effectively by the 81st Regiment and the artillery of the station, in the presence of the Judicial Commissioner, Mr Robert Montgomery, Sir John Lawrence being at the time in Rawalpindi. The 81st also occupied the Fort of Lahore and the Govindgarh Fort at Amritsar.

Returning towards the city, the traveller will pass on the right the village of *Shahu-ki-Ghari*, where are a number of large tombs, some

with cupolas, but all more or less ruined. Some way W. of the village is Kila Gujar Singh, so called from one of the Bhangi Sardars, and near it, and upon the main road from the Civil Station to the railway station, is the most venerated tomb in Lahore or its vicinity. It is called the Tomb of Bibi Pakdaman (the chaste lady). According to tradition, this saint was the daughter of the younger brother of Ali by a different mother. Her real name was Rakiya Khanum, and she was the eldest of six sisters, who are all buried here, and who fled with her from Bagdad after the massacre at Karbala; she died in 728 A.D., at the age of ninety. Visitors are expected to take off their shoes. There are five enclosures, and the tomb of Rakiya is in the fifth. It is of brick, whitewashed.

Shahdara is situated beyond the road bridge, on the right bank of the Ravi, about $1\frac{1}{2}$ m. to the N. of the railway bridge over that river. The journey by rail is 5 m. to the Shahdara station, from which the Tomb of the Emperor Jahangir is $1\frac{1}{2}$ m. It is more convenient to go in a carriage (about $5\frac{1}{2}$ m. drive).

Before crossing the railway is seen (right) the tomb of Nurjahan, wife of Jahangir, a plain building of one storey; it has been restored and is surrounded by fine lawns and flower-beds.

After crossing the railway a domed building is passed on the left. This is the tomb of Asaf Khan (see below); and immediately E. of it is the enclosure, which was the *sarai* or outer court of the mausoleum. An archway of white marble, and 50 ft. high, leads into the garden court of Jahangir's mausoleum, once the Dilkusha garden of the Empress Nurjahan (Mihir-un-nissa). The

mausoleum consists of a fine terraced platform, not unlike the lowest terrace at Sikandra (p. 242), with four minarets at the corners and a small pavilion over the tomb chamber in the centre.¹ The passage to the tomb chamber is paved with beautifully streaked marble. The cenotaph is of white marble, inlaid with *pietra dura* work, and stands in the centre of an octagonal chamber. On the E. and W. sides are the ninety-nine names of God, most beautifully carved, and on the S. side is inscribed, "The Glorious Tomb of His High Majesty, Asylum of Protectors, Nur-ud-din Muhammad, the Emperor Jahangir," 1627 A.D. On the four sides are exquisite screens of lattice-work. The lamp over the tomb was presented by the Maharana of Kotah.

Outside the entrance a staircase leads up to the flat roof of the terrace, covered with a fine marble tessellated pavement. The minaret at each corner is 95 ft. high from the platform. The marble parapet which ran round the pavement was taken away by Maharaja Ranjit Singh, but has been restored. The minarets are four storeys high, and are built of magnificent blocks of stone 8 ft. long. From the top there is a fine view over the Ravi to the city of Lahore.

The Tomb of Asaf Khan, brother of the Empress Nurjahan, is an octagon surmounted by a dome. It has been utterly ruined and almost entirely stripped of the lovely *kashi* work which once adorned it. In the portals some fragments still remain to show how splendid it once was. The cenotaph is of white marble. The Tughra writing on it is extremely fine, and resembles that on the tomb of Jahangir. The gardens here and round the Emperor's

¹ The model of the tomb was that of Iti-mad-ud-daula at Agra (see p. 242).

Tomb have been much improved of late. Asaf Khan and his sister had entire control over the indolent Jahangir during the last years of his life. Before marrying Jahangir, Nurjahan was married to an Afghan, Ali Kuli Khan, who lived at Burhanpur. Jahangir compassed his death, and carried Nurjahan away to Delhi; as she refused to marry him, he imprisoned her in a small palace, and made her an allowance of 14 annas a day. Eventually Asaf Khan persuaded her to marry Jahangir. On his death Nurjahan wished a younger son of the Emperor married to her daughter by her Afghan husband to succeed him: but Asaf Khan stood by Shah Jahan, and the ex-Queen at once retired into private life. Asaf Khan died six years later, having attained to the rank of Khan-i-Khanan and Governor of Lahore; and his tomb was erected by the Emperor, who was himself born at Lahore. Nurjahan survived her brother for four years.

18 m. W. of Lahore is Shaikh-pura, formerly Jahangirabad, the hunting-seat of Jahangir and of Dara Shikoh, the eldest brother of Aurangzeb.

The road crosses the bridge over the Ravi. Further up-stream the river-pavilion of Kamran has been demolished. The road, at about 4 m., enters a dreary tract of long grass and jungle. A bridge over the Baghbachcha (Tiger Cub), a branch of the Dig, is then passed. At Mandiali there is a good Road Chauki, standing 100 yds. back from the road.

On the left, at Shaikh-pura, is a garden-house built by Rani Nakayan, Queen of Ranjit Singh. At the S.W. corner of the garden is her Samadh, an octagonal building. Over the door is a picture of the ten Gurus, with an inscription. Across the road is a very clean and comfortable house which

belongs to the Raja Jagirdar, grandson of Maharaja Teja Singh, and is lent by him to travellers.

The Raja resides in the fine old fort here.

There is good shooting round about. 3 m. from the town is a large tank surrounded by flights of steps with a three-storeyed *barahdari* in the centre. A tall minaret, Hiran Minar, or Deer Tower, stands near an entrance gateway N. of the tank.

ROUTE 16.

LAHORE to PESHAWAR by Gujran-wala, Wazirabad Junction, Gujrat, Lala Musa Junction, Jhelum, Rohtas, Manikyala, Rawalpindi, Golra, Attock, and Naushahra, with expeditions by rail from Wazirabad to Sialkot and Jammu from Mandhra to Chakwal, from Lala Musa to W. Panjab, from Golra to Khushalgarh and Kohat, from Sarai-kala to the hill station of Abbottabad (Hazara) and from Naushahra to Hoti Mardan and the Malakand.

Lahore to Peshawar is 288 m. by the North-Western Railway, and the time occupied in transit eleven hours and a half. Fares—Rs.28, Rs.13, 8 as., Rs.3, 6 as.

5 m. Shahdara station. The tomb of the Emperor Jahangir, 1½ m. off, is described on p. 321. From here a branch line runs (56 m.) to Sangla (p. 324).

43 m. Gujranwala station (R., D.B. with four suites of rooms) (population 29,472). Headquarters of a District, and the birthplace of Ranjit Singh. At $\frac{1}{2}$ m. beyond the station is the *Samadh of Mahan Singh*, father of the great Maharaja. It is an octagonal building, 81 ft. high to the top of the gilt ornament on the summit. Within are the sculptured rosettes or knobs which mark where the ashes are deposited. The large rosette surrounded by twelve smaller ones is inscribed "Sarkar Ranjit Singh." That nearest the entrance is in memory of a blue pigeon that fell down into the flames in which Ranjit Singh and his concubines were being consumed. Other rosettes mark the ashes of Mahan Singh Padshah, Maharaja Sher Singh, and Sarkar Nau Nihal Singhji. There is a narrow but lofty pavilion, covered with mythological pictures, among which is one of Duryodhana ordering Draupadi (p. lxxii) to be stripped. As fast as the clothes were pulled off her she was supernaturally reclothed. At 100 yds. to the E. is the pavilion of Mahan Singh, a handsome building, now used as the reading-room of the town. Close to the market-place is the house where Ranjit Singh was born, with a frieze of geese round the courtyard.

N.E. of the town is the *Barah-dari*, or pavilion, of the famous General Hari Singh Nalwa. It stands in 40 acres of garden and grounds. To the E. is a pavilion 12 ft. high, full of small niches for lamps. On the E. wall is a painting of warriors and elephants, now almost gone. At 70 yds. to the N. of the house is the *Samadh of Hari Singh* (see p. 339). The place where the ashes lie is marked by a knob shaped like a budding flower. There are no *sati* memorials. A picture on the wall inside is a portrait of Hari Singh hawking, with a string of ducks passing over his head. The gardens

round Gujranwala are famous for oranges. Gujranwala is now famous for iron safes, which are being exported in large numbers.

62 m. Wazirabad junction station (R., D.B. with four suites of rooms) (17,146 inhabitants). From here a line runs N.E. to *Sialkot* and *Jammu* (see below). This place, founded by Wazir Khan in the reign of Shah Jahan, became, under the rule of Ranjit Singh,¹ the headquarters of General Avitabile, who built a completely new town on the plan of a parallelogram, surrounded by a wall. A broad bazar runs from end to end. Close to the town is one of the most famous gardens in the Panjab, laid out by Diwan Thakur Das Chopra. N. of Wazirabad is the great *Alexandra Bridge* over the Chenab, opened on 27th January 1876 by King Edward VII., then Prince of Wales.

The Chenab was a most difficult stream to deal with, owing to the sudden furious floods to which it is subject and the absence of a well-defined river-bed.

An expedition may be made by branch line from Wazirabad to Sialkot. Wazirabad is famous for its cutlery, sword-sticks, and cane-sticks.

27 m. *Sialkot* station (D.B.). A town with military Cantonment 1 m. N. (population 64,869). Sialkot has been identified with the ancient Sagala, the capital of the Indo-Greek Menander (the Milinda of the Buddhists) and of Mihirakula the Hun. The *Church* is a striking object, having a steeple 150 ft. high. Near the railway station and the city is a lofty old fort, in which the British residents took refuge on the mutiny of the two native regiments on 9th July 1857. A number, however, were killed before they could make their escape, and Brigadier-General Brind, com-

¹ See p. lxxxvii.

manding the station, died after reaching the fort of the wounds inflicted on him. The mutinous regiments spared most of their officers, and even offered them higher pay to lead them to Delhi! The normal garrison includes a regiment of British Infantry and Cavalry, one battery of Horse Artillery, one Ammunition Column, two regiments of Native Cavalry, one regiment of Native Infantry, one Mule Corps, and one Railway Company of Sappers and Miners. The railway continues to Jammu, and a line has been opened from Sialkot to Narowal, 39 m.

52 m. Jammu station (D.B.) (population 31,726). This is the winter capital of the Maharaja of Jammu and Kashmir State, which has an area of 81,000 sq. m. and a population of 2,521,400 persons. The present Chief of the State (of which the annual revenue is about 113 lakhs) is His Highness Lieutenant-General Maharaja Sir Pratap Singh Bahadur, G.C.S.I., G.C.I.E., G.B.E., grandson of the famous Dogra Maharaja, Gulab Singh, to whom Kashmir was made over in 1846, after the First Sikh War.

The Old Palace at Jammu, in the N.E. corner of the city, has no special pretensions to beauty. It is entered by a large irregular quadrangle, on the right side of which is a vast reception-room. The veranda of the small reception-room overlooks the Tawi River.

W. of the city is a temple covered with plates of copper-gilt. A little to the N. of it is the new building constructed for King Edward's visit, as Prince of Wales, on 20th-22nd January 1876; the Prince of Wales College commemorates that of King George V. on 10th December 1905, before he became King. Close by, to the E., is the old parade ground, with the hospital and college to the S.E. The *Gumti Gateway*, by which the

city is entered from the River Tawi, is approached by a very picturesque flight of dressed stone steps. A new road leads from below it to the Residency R.H., in the S.E. corner of the city. 2 m. S. of this gate is a fine garden belonging to the Maharaja.

The Banihal route to the Kashmir Valley starts from Jammu (see Route 17). Facing the town on the N. side is a ridge known as Roulki, on which the sericulture buildings have been made, in which silk reeling is carried on and cocoons are stored.

From Wazirabad a branch line runs through Sangla, 69 m., to Lyallpur, 96 m. (so named after Sir J. B. Lyall, G.C.I.E., Lieutenant-Governor, 1887-1892), to Shorkot Road junction, 163 m., and Multan, 232 m. At Chichoke junction a line connects with Lahore and another branch runs through the S. of the district also to Shorkot Road. These lines are required to convey excess grain to Karachi.

The district of Lyallpur is unique in India. Its existence depends on the irrigation afforded by the Chenab Canal, and the area is 3303 sq. m. It contains a specially-selected population of 880,239 persons. The irrigated area amounts to 1,430,136 acres, producing crops annually valued at £35,000,000. The district is the headquarters of five canal divisions. The Panjab Agricultural College is at Lyallpur.

71 m. Gujarat station. This pretty place is the administrative headquarters of a district of the same name. The town (altogether 19,090 inhabitants) stands on the ancient site of two earlier cities. The second, according to General Cunningham, was destroyed in 1303 A.D. Two centuries after this Sher Shah was in possession of the country, and either he or Akbar founded the present town.

Akbar's fort stands in the centre of the city. It was first garrisoned by Gujars, and took the name of Gujarat Akbarabad. Akbar's administrative records are still preserved in the families of the hereditary registrars. During the reign of Shah Jahan, Gujrat became the residence of a famous saint, Pir Shah Daula, who adorned it with numerous buildings. In 1741 the Ghakkars established themselves at Gujarat, and in 1765 the Sikhs acquired the country. The Civil Station, in which is the D.B., lies to the N. In it are a Church of Scotland Mission Church and Schools.

The Battlefield.—The decisive Battle of Gujarat, which ended the Second Sikh War, was fought on the 21st of February 1849. The villages of Kalra, $2\frac{1}{2}$ m. S. of the D.B., were the key of the Sikh position. The villages are situated in a flat plain, where there are no natural advantages to assist an army in maintaining its position. Lord Gough's camp, which had been at Wazirabad, where he was joined by the force which had captured Multan under General Whish, was moved to Shadiwal between 17th and 19th February. Thence at 7 A.M. on the morning of 21st February the British force advanced on the Sikh position at Kalra. The artillery went to the front and poured their fire on the Sikh army, which comprised six brigades of infantry with fifty-nine guns, and four great bodies of Sikh cavalry with 4000 Afghan horse, the British army consisting of 25,000 men and nearly 100 guns. The heavy English guns opened on the Sikhs at 1000 yds., and crushed their lighter metal. As the Sikh fire ceased, the British field-batteries were constantly pushed forward. By 11.30 A.M. most of the Sikh guns had been withdrawn, dismounted, or abandoned. The British infantry then advanced, deployed, and drove

the Sikhs from their position in the two villages of Kalra. There was no attempt to make a further stand at Gujarat, and the Sikh army streamed away in utter defeat to the E. and W. of the town, which was occupied by one o'clock. The British losses were only 766.

Next day General Gilbert, with 12,000 men, started in pursuit of the enemy, and at Rawalpindi received the submission of the entire Sikh army.

In the cemetery at *Shah Jahan-gir*, called after a fakir of that name, are the tombs of those who fell in the battle. Beyond, to the E., are two mosques, one of which is rather remarkable. Gujarat is one of the starting-places for Kashmir (see Route 17).

82 m. Lala Musa junction station (R.).

The Sind-Sagar line runs 345 m. from here to Sher Shah junction, S. of Multan (p. 355), passing Chilianwala, Malakwal junction (from which a short line of 18 m. runs to Bhera and a longer one to Sargodha, 47 m., and Jhang, 116 m., in the Jhelum Canal Colony, and thence Multan), Haranpur (for the Khewra salt mines), Pind Dadan Khan, Khushab (for Shahpur), Mitha Tiwana (the headquarters of the famous Tiwana horsemen), Kundian (where the line from Campbellpur (p. 334) joins in), Darya Khan (for Dera Ismail Khan, 12 m. distant across the Indus, population 35,131, headquarters of a frontier District; Sir H. M. Durand, Lieutenant-Governor of the Panjab, 1870-71, who lost his life on 1st January 1871 from an accident at Tánk, is buried in the churchyard here), Mahmud Kot (for Dera Ghazi Khan, population 18,466), also on the right bank of the Indus, now almost destroyed by the river, and Muzaffargarh. Between Kundian and Mahmud Kot the table-rock of the Takht-i-Sulaiman, the

"Throne of Solomon," 12,300 ft., will be seen on the W. horizon on clear days.

The only ruins of much antiquity and interest to be found in the District are the two forts of **Kafir Kot**, situated on small hills attached to the lower spurs of the Khasor range, and overlooking the Indus. The main features of these forts are an outer defensive wall, consisting of rough blocks of stone, some of great size, and various groups of building, inside resembling small Hindu temples, and more or less carved. The area of these forts is considerable, and they could have held a good-sized garrison. Traces are still to be seen of their arrangements for raising water from the Kachi below. No legends are attached to them beyond that they are supposed to have been occupied by the last of the Hindu Rajas, Tel and Bil. These forts certainly point to the existence, in times before the Muhammadan invasion, of a Hindu Raj in this corner of the District possessed of considerable resources and architectural skill.

At Chilianwala was fought, in the Second Sikh War, on 13th January 1849, the most desperate of all the battles between the British and the Sikhs. The Sikhs advanced from their position on high ground between Rasul on the N. to Moong on the S., and opened a heavy fire on the British troops, and Lord Gough ordered a general attack on them, though only a very short time of daylight remained. In making this the two brigades on the left under Sir Colin Campbell became separated, and that of General Pennycuick was badly checked, and finally had to fall back, while the absolute failure of the cavalry on the right of the British line exposed the divisions there to a flank attack, which prevented their advance.

Finally the troops were recalled, the British losses being 2238, and several British guns were captured. On the Sikh side from 20,000 to 25,000 men were engaged, and on the British side 14,000. A full view of the field may be obtained from the obelisk erected on the mound to the E. of it, from which Lord Gough watched the battle. Alongside of the obelisk is a cross and a small cemetery, in which General Pennycuick and his son and the officers of the 24th Regiment, which suffered most of all, and other officers who fell at Chilianwala, are buried. On the news of the battle reaching England Lord Gough was recalled; but before the orders of recall reached him he had won the final victory of Gujarat.

According to General Cunningham, Alexander crossed the Jhelum somewhere in the neighbourhood of Rasul and Moong, and defeated Porus in 326 B.C., not very far from the field of Chilianwala.

Those interested in geology and in picturesque sights will find a visit to the famous Khewra salt mines (D.B.) will well repay the trouble of the journey. It would be well to write beforehand to the Superintendent of the Mines for facilities to visit them.

20 m. from Pind Dadan Khan, and high up in the Salt Range, is the picturesque village and garden of Choa Saidan Shah, and near it are the temples of Katas, a very holy place of Hindu pilgrimage. Khushab, on the right bank of the Jhelum, is a place of great antiquity.

Beyond (92 m.) Kharian the line traverses a curiously broken tract known as the Pabbi, which is being afforested, and crosses the Jhelum River by a fine bridge, affording a grand view of the snows of the Pir Panjal and of the town on the N. bank,

103 m. Jhelum station (R., D.B.), is a modern town situated on the right bank of the Jhelum River (population 12,298 in the town and 7380 in Cantonment) and the administrative headquarters of a district of the same name, built on an ancient site. The Civil Lines and Cantonment lie 1 m. E. and W. of the town respectively. The attempt to disarm the Native Regiment here on 7th July 1857 was badly mismanaged, and resulted in the loss of valuable lives. Many ancient pillars have been dug up near the railway station, and amongst them one with a human face in the Greek style, which is now in a Lahore museum. Another is to be seen in the railway engineer's compound. The present town is of modern origin, the old town, which may have been the Bucephala of Alexander, having been on the left or opposite bank of the river. The town possesses one Anglo-Vernacular Middle School of the A.P. Mission and a Government High School. Besides the Civil Hospital, the A.P. Mission also maintains a hospital for women.

Jhelum is an important timber-depot. The timber cut in the Kashmir forests is floated down the river and collected here.

Dhangrote, on the Jhelum River, is a well-known place for *mahsir* fishing, some 10 m. from Jhelum.

Rohtas is 11 m. N.W. of Jhelum. Carriage-road to the Kahan River 8 m., and after that cart-track along the river, and then a bridle-path below barren hills 200 ft. high. This famous fort, which is partly visible from the railway, stands on a hill overlooking the gorge of the Kahan River. Its walls extend for 3 m. in places from 30 ft. to 40 ft. thick, and enclose about 260 acres. It was built by Sher Shah in 1452 as a check on the Ghakkar tribes. There are 68 towers and 12 gateways.

The entrance, up a steep path, is by the Khawas Khan Gate, on the N.E. of the hill. The Sohah Gate (where is the D.B.) is on the S.W. It is a fine specimen of the Pathan style, over 70 ft. in height, with balconies on the outer walls, and is reached through the town, with a deep fissure on the left, and on the right an inner wall with a lofty gateway, called after Shah Chand Wali. Within this stand the ruins of Man Singh's palace, built after he reduced Kabul (p. 197). The S.W. corner is a lofty barahdari, with a stone finely carved with figures of birds, etc. In the S.E. corner, 150 ft. off, is a smaller barahdari, about 25 ft. high. The wall between the two is gone. There were twelve gates to the fort, but they are now nearly all in ruins. The Shisha Gate (an inner gate) was so called from the Harim's Hall of Mirrors, which adjoined it.

The gradients of the line between Jhelum and (135 m.) **Sohawa** are very considerable, and the alignment has been several times changed. The scenery of the East extremity of the Salt Range, through which the line passes, is very wild in parts.

Tilla, an Eastward continuation of the Salt Range, 3242 ft. above the sea. The hill is sometimes used as a summer resort by officers of Jhelum District. A famous monastery of Jogi fakirs, one of the oldest religious institutions in N. India, is situated here.

Nandana.—A place of historical interest in the Pind Dadan Khan tahsil of Jhelum District, 14 m. W. of Choa Saidan Shah, in a remarkable dip in the outer Salt Range. Near by are extensive remains of a temple, a fort, and a large village. The temple is in the Kashmiri style, but faces W. instead of E., as temples of that style usually do. Of the fort two bastions of large

well-cut sandstone blocks still remain. Nandana is mentioned as the objective of one of Mahmud of Ghazni's expeditions in 1014. Early in the 13th century it was held by Kamruddin Karmani, who was dispossessed by a general of Jalaluddin Sultan of Khwarizm. The latter was defeated on the Indus in 1221 by Chingiz Khan, one of whose officers—Turti, the Mongol—took Nandana and put its inhabitants to the sword. It appears in the list of places conquered by Altamsh, who entrusted it to one of his nobles.

Mayo Mine.—A salt mine at Khewra, in the Pind Dadan Khan tahsil of Jhelum District, Panjab. When the salt was first worked is not known, but excavations existed on the spot as far back as the time of Akbar, and the miners have a tradition that their first settlement dates from the 6th century of the Muhammadan era. The existing mine was named after Lord Mayo in 1870. It is estimated that 534,512 tons had been excavated up to 1850, and from that year to the end of March 1904 the output was 2,572,705 tons. It is calculated that a further supply of $8\frac{1}{2}$ million tons is easily accessible in the part of the hill which has been explored, and that large quantities exist in its unexplored parts beyond the limits of the existing mine. The mine has a maximum length of 1405 ft., and is 2691 ft. broad at its widest part. Three tramways run through the mine, two of them being connected by a self-acting incline, on which the loaded draw up the empty trucks. The revenue (duty) realised from the sale of salt is about 46 lakhs. There are three R.Hs. for the accommodation of travellers.

Katas.—A sacred pool in the centre of the Salt Range, 15 m. N. of Pind Dadan Khan, at an elevation of over 2000 ft. It is visited

every year by thousands of pilgrims, who come to bathe in its waters. The Brahmanical story is that Siva, being inconsolable at the death of his wife, Sati ("The True One"), tears rained from his eyes and formed the two pools of Katás, or Kataksha ("Raining Eyes"), and Pushkar, near Ajmer. At the foot of Kotera, the W. hill, are the remains of twelve temples, clustered in a corner of an old fort. These are called the *Sat Ghara*, or seven temples, and are particularly attributed to the Pandavas, who are said to have lived at Katás during a portion of their seven years' wanderings. **Choa Saidan Shah**, which contains a good R.H., is noted for roses and the attar made from them.

Malot.—A fort and temple on a precipitous spur projecting from the Southern edge of the Salt Range, about 9 m. from Katás. The fort is said to have been built five or six centuries ago by Raja Mal, a Janjua Chief, whose descendants still hold the village. The temple, with its gateway, stands on the extreme end of the cliff. They are in the earlier Kashmiri style, built of coarse red stone, much injured by the action of the weather. The temple is 18 ft. sq. inside, with remarkable fluted pilasters and capitals, on each of which is a kneeling figure.

Jalalpur.—An ancient site on the right bank of the Jhelum River (population about 3000). The village was identified by Sir Alexander Cunningham with the site of the ancient Bucephala, built by Alexander the Great in memory of his famous charger, which was killed in the battle with Porus at the crossing of the Jhelum; but doubts have been cast on the identification. Jalalpur is now nothing more than a small agricultural village, of no importance apart from the interest attaching to its antiquarian

remains. It has a dispensary, lately opened.

Siv Ganga, 3 m. N.E. of Malot. In it stands a small temple in the later Kashmiri style, and near Warala, a hamlet on the adjacent spur, a Buddhist sculpture was found by the villagers some years ago and set up by Hindus in a small temple at Siv Ganga. It having at some time been broken, and thus rendered useless for purpose of worship, the Hindus allowed its fragments to be sent to the Lahore Museum, where it was restored. The relief originally contained eighteen or nineteen figures, the central one, a Bodhisattvas, carved in a somewhat late stage of Gandhara art.

163 m. Mankiala station is the nearest point to Manikyala Tope, which is 1 m. distant.¹

Manikyala was first noticed by Mountstuart Elphinstone in 1815, and afterwards thoroughly explored by General Ventura in 1830. In 1834 the stupa was explored by General Court, and thirty years after by General Cunningham. The date is uncertain. There are coins taken from it of Kanishka and Huvishka, which date from the beginning of the Christian era, but with them was found a coin of Yaso Varmma, who reigned not earlier than 720 A.D., and many silver Sassano-Arabian coins of the same period. General Cunningham thinks that the stupa may have been originally built by Huvishka, who deposited coins of his own reign and of his predecessor Kanishka, and that the stupa, having become ruinous, was rebuilt in its present massive form by Yaso Varmma, who re-deposited the relic-caskets with the addition of a gold coin of

himself and several contemporary coins of Arab governors.

The dome of the stupa, which was probably about 100 ft. high, is an exact hemisphere, 127 ft. in diameter. The outer circle measures 500 ft. in circumference, and is ascended by four flights of steps, one in each face, leading to a procession path 16 ft. in width, ornamented both above and below by a range of dwarf pilasters, representing the detached rail of the older Indian monuments.

Mr Fergusson says (1, 96): "It is, indeed, one of the most marked characteristics of these Gandhara topes that none of them possess, or ever seem to have possessed, any trace of an independent rail; but most have an ornamental belt of pilasters, joined generally by arches simulating the original rail. This can hardly be an early architectural form, and leads to the suspicion that, in spite of their deposits, their outward casing may be very much more modern than the coins they contain."

At 2 m. to the N. of Ventura's Tope is Court's Tope. Here the earth is of a bright red colour, and General Cunningham identifies this stupa with that mentioned by Hiuen Tsang as "the stupa of the body-offering"; while at 1000 ft. to the S. of it is Hiuen Tsang's "stupa of the blood-offering," which that pilgrim ignorantly attributed to its being stained with the blood of Buddha, who, according to a curious legend, is said¹ to have offered his body to appease the hunger of seven tiger cubs. The stupa of the body-offering was opened by General Court, who found in a stone niche, covered by a large inscribed slab, three cylindrical caskets of copper, silver, and gold, each containing coins of the same metal; four gold coins of Kanishka were found in the gold box; in the silver box were seven silver Roman denarii of the last years of the Republic,

¹ This was in a previous existence.

¹ Cunningham's *Archaeol. Rep.*, 2, 152; Fergusson's *Ind. Arch.*, 1, 94; James Prinsep's *Journal*, vol. 3.

the latest being M. Antonius Triumvir, and therefore not earlier than 43 B.C. The eight copper coins in the box belonged to Kanishka and his predecessors. The inscription has been studied by M. Senart and Professor Lüders.

General Cunningham ran trenches across the mound which now represents the monastery, and brought to light the outer wall and cells of the monks, forming a square of 160 ft.

179 m. Rawalpindi Cantonment junction station,* (D.B., Hotels, R.). This is the headquarters of a Civil Division and District, of the 2nd Army Division, and of the Northern Army in the winter. The Cantonment is one of the largest military stations in India, and has been surrounded by a chain of detached forts, which have since been dismantled. The city and Cantonment have a population of 86,483, the majority of whom are Muhammadans. It received its name from Jhanda Khan, Ghakkar Chief, who restored the town of Fatehpur Baori, destroyed by an invasion of the Mughals in the 14th century. A very fine Mall runs for 4 m. through the station, forming part of the Grand Trunk Road. Near the club is a memorial statue of the late Queen Victoria. The *English Church* is about 1 m. from the railway station, and near by is the *Scotch Church*, which was built some years ago. The *Fort* is about $\frac{1}{2}$ m. S. of that again. The *Public Garden* by this is a park of 40 acres, with a low forest well preserved, and close by are the *Golf Links*, which consist of 18 holes. The town has nothing very remarkable in it.

Rawalpindi is the starting-place for Murree,* 37 m. distant; there is now a motor as well as a tonga service to it. There are two D.Bs. on the road—one at Ba akao, 13 m., and the other

at Tret, 26 m. from Rawalpindi. Murree¹ is the N. sanatorium of the Panjab and the headquarters of the Northern Army in the summer. Barracks were erected in 1853. The houses are built on the summit and sides of an irregular ridge, and command magnificent views over forest-clad hills into deep valleys, studded with villages and cultivated fields, with the snow-covered peaks of Kashmir in the background. The highest point of the station is 7507 ft. above the sea-level, and the loftiest peaks behind the sanatorium attain a height of over 9000 ft. The climate is well adapted for Englishmen, the lowest recorded temperature being 21°, the highest 96°.

The stationary population was at the census in March 1911 only 1705, but in the summer season rose to 16,934. There is very little game now to be found in the hills. The camps and small stations in the hills N.W. of Murree, known as the Galies (Barian, Ghora Dacca, Khanopur, Doonga, Changlagali, Khairagali, and Nathiagali), are most conveniently reached from Murree. The most Northerly of them, Nathiagali, is the summer residence of the Chief Commissioner of the N.W. Frontier Province. The walks through the Galies are lovely in spring—nothing in the whole Himalayas is more beautiful.

Rawalpindi is also the starting-place for Kashmir by Murree and the Jhelum Valley. This is the best route into the country (see Route 17).

9 m. beyond Rawalpindi, on an eminence above the little Margala Pass, is the monument of General John Nicholson, with the following inscription:—

"Erected by friends, British and Native, to the memory of Brigadier-General John Nicholson, C.B., who, after taking a hero's

¹ At the S.E. point of the station lies the Murree Lawrence School.

part in four great wars, fell mortally wounded, in leading to victory the main Column of assault at the great siege of Delhi, and died 22nd September 1857, aged 34."

188 m. **Golra** junction for the line to Khushalgarh, 79 m. from Rawalpindi, Kohat, 111 m., Hangu, 137 m., and Thal, 173 m., at the entrance to the Kurram Valley. At Basal (56 m.) the line is crossed by that from Campbellpur (p. 334), which, with the Sind-Sagar Railway, serves the whole of the position of the left bank of the Indus. From Kalabagh, on a short branch line from Kundian, a light railway was required to join with (83 m.) **Bannu**, commanding the Tochi route. At Khushalgarh (79 m.) the Indus is crossed by a cantilever bridge, with a roadway over the railway, the river flowing through a deep, bold gorge; the railway from this point to Kohat has been converted to the broad gauge: beyond Kohat, as far as Thal, the line is of the 2 ft. 6 in. gauge. On the N. side of the road at Kohat are the hills of the Jowaki Afridis against whom a campaign was waged in 1875-6, and N., beyond Kohat, is the Samana Range of the Orakzai, against whom campaigns were undertaken in 1889 and 1892, and again on the occasion of the Tirah Afridi expedition in 1897. The Kurram Valley, to which the route beyond Thal leads, was detached from Afghanistan in 1879, but was not taken under direct British management till thirteen years later. The Safed Koh Mountains, with the grand peak of Sika Ram, rise magnificently along the N. side of the valley.

194 m. **Sarai kala** junction (D.B.) for the line to Havelian, and station for the ruins of **Taxila** (ancient *Takshasila*). Refreshment and waiting-rooms at station and small P.W.D. Bungalow about 1 m. away, permission to occupy which

may be obtained from the Executive Engineer, Rawalpindi District. Less than $\frac{1}{2}$ m. from the station is the Archaeological Office, where permits can be had to view the excavations. The remains of Taxila lie to the E. of the railway and are spread over an area of some 25 sq. m. Besides other monuments they comprise three distinct cities. The earliest of these is situated on the Bir mound (at the N. end of which stand the Archaeological Office and bungalow), and was in occupation probably from the second or third millennium B.C. until about 180 B.C. The second city, known as Sirkap, is on the further side of the Tamrah Nala (*Tibero-nalo* or *Tibero-potamos* of the Greek historians), and appears to have been built by the Greeks and to have been occupied successively by the Greeks, the Scythians, the Parthians and the early Kushans. The third city, now called Sirsukh, about 1 m. N.E. of Sirkap, was probably founded by the Great Kushan Emperor Kanishka (2nd century A.D.) and flourished for some five centuries or more. It was in this city that the Chinese pilgrim, Hiuen Tshang, sojourned and from it that the distances and directions to the various monuments described by him are calculated. Besides these three cities, to each of which the name of Taxila (*Takshasila*) was transferred in succession, various other outlying monuments have recently been excavated, the most important among them being the Chir Tope near the village of Shahpur, on the S. side of the Hathial spur, a massive temple with Ionic pillars at Jandial, and two groups of Buddhist buildings, the one in a defile in the hills near the village of Mora Moradu, about 1 m. S.E. of Sirsukh, and the other on a hill near the village of Jaolian, about twenty minutes' walk from it.

To visit all the remains now brought to light at Taxila two days

are required. At present the roads are unmetalled, and, except in good weather and when they have recently been repaired, are not suitable for motor-cars. A "Bareilly" cart can generally be obtained at Saraikala, but it is advisable to arrange for it in advance. In this and other matters the Overseer of the Archaeological Bungalow gives whatever assistance he can. Assuming that a visitor has only five or six hours to spare, a good plan is to drive to the Chir Tope, thence walk (about 1 m.) through a defile in the hills to the stupa of Kunala, and afterwards descend into the city of Sirkap. The conveyance can meanwhile go round to the N. side of Sirkap, and having rejoined it the visitor can drive to the Temple of Jandial, and thence to Mora Moradu and Jao-lian. The *kachcha* road passes within about 1 m. of the two last-mentioned places, and thence a footpath leads across the fields.

The remains at the **Chir Tope** (ancient name *Dharmarajika stupa*) comprise a large number of Buddhist stupas, chapels and monastic dwellings. In the centre is the Main Stupa, erected in the 1st century B.C., but subsequently enlarged and repaired. The decorative stone facing on the E. side dates from about the 4th century. Around the main edifice there originally stood a circle of small stupas, but, as they fell to decay, a series of chapels was constructed on their ruins, and numerous other stupas and chapels were erected round about, with a monastery (not yet excavated) to the N. The buildings on this site are of special antiquarian interest, as they are constructed in various styles of masonry, and as their relative ages have been ascertained they offer reliable data for fixing the age of many other monuments in this part of India. Among them the visitor should notice in particular the chapel in the N.E. corner with

the remnants of a colossal figure of the Buddha which once stood between 30 ft. and 40 ft. in height, a small apsidal temple on the W. side of the Main Stupa, and a chapel not far from it, where relics of the Buddha, accompanied by an inscription on a silver scroll (of the year 136), were discovered.

The **Stupa of Kunala** is said to have commemorated the spot where Kunala, the son of the Emperor Asoka and Viceroy of Taxila, had his eyes put out through the guile of his step-mother Tishyarakshita. The story, which resembles that of Phædra and Hippolytus, is told by Hiuen Tshang. The original monument on this site is only about 10 ft. in height, and can be seen emerging from the core of the larger structure on its W. side. It dates probably from the 1st century A.D.; the larger structure was built around it in the 4th century A.D. and extended over the ruins of the ancient city wall. An exceptional feature of this later stupa is the inward curvature of the walls—an idea which was perhaps borrowed from the Greeks but misapplied. Immediately to the W. of the stupa is a spacious monastery. From the Kunala stupa a fine bird's-eye view can be obtained of the lower city of Sirkap and the broad Haro Valley beyond. The monument about 5 m. distant on the last spur of the hills bounding the valley on the N., is the famous **Stupa of the Head-gift**, now known as the Bhalar stupa, in the monastery belonging to which Kumārābda composed his Buddhist treatise. The monastery is still in process of being excavated.

The remains excavated in **Sirkap** comprise the main street running N. and S., with the fortifications at its N. end and a variety of buildings separated by lanes laid out with considerable regularity. The buildings now visible

on the surface belong mainly to the Parthian and early Kushan period. Beneath them are other buildings of the Scythian period and below these again others of the Greek period. Among the latest remains are a number of houses, several small shrines, believed to be Jaina, a large Buddhist apsidal temple, and a palace closely resembling in plan the palaces of Assyria. The houses were two or three-storeyed and divided into several open courts, with a series of chambers around each. Their size suggests that they were occupied either by several families or by professors with their numerous pupils, for Taxila was the most famous seat of learning in ancient India and attracted students from far and near. A curious feature of the houses, which is noticed also by Philostratus in his *Life of Apollonius*, is that the rooms on the lowest floor are in the nature of *takkhanas*, access to which was provided by trap-doors from the chambers above. Large numbers of antiquities, including all sorts of domestic utensils, have been found in the buildings. Noteworthy among them are an Aramaic inscription of about 400 B.C., a head in silver of the Greek god Dionysus, a bronze statue of Harpocrates, the Egyptian child-god of silence, and a fine collection of gold jewellery, including good specimens of Greek workmanship.

The Temple at Jandial dates from about the beginning of the Christian era, and is planned like a Greek temple, with the addition of a solid tower or *ziggurat* between the *naos* and *opisthodomos*, from which the rising and setting sun could be observed. This and other considerations (notably, the absence of images) point to the conclusion that it was a temple of the Zoroastrian fire-worshippers, who must have been numerous at

Taxila during the Scythic and Parthian periods. It is possible that this is the temple described by Philostratus where Apollonius is said to have waited before entering the city of Taxila, though it does not tally with his descriptions in all particulars.

The Buddhist stupas and monasteries at Mora Moradu and Jaolian are the best-preserved monuments of their kind and age in India. Those at Mora Moradu were first erected in the 2nd century A.D., but largely renovated and repaired two or three centuries later; it is to the later period that the images and reliefs which adorn the walls belong. The monastery was two-storeyed and consisted of a spacious court surrounded by cells, with several additional chambers on its E. side. One of the latter served as a bath-room and another as a refectory. In one of the cells of the larger court is a perfect specimen of a stupa, with all its umbrellas complete, and in the same court are several interesting groups of stucco figures. The main stupa to the W. of the monastery is chiefly remarkable for the masterly stucco reliefs of the Buddha and his attendants, which still survive on its S. side. From it a charming view is obtained of the Mora Moradu gorge and valley of the Haro below. The remains at Jaolian are of the same character as those of Mora Moradu, but the stupa is enclosed by courts surrounded by a series of chapels, and there are numerous smaller stupas adorned with a wealth of stucco reliefs. On the other hand, none of the sculptures here is so masterly as that at Mora Moradu. In one of the smaller stupas (to the S. of the main edifice) was discovered a remarkable relic casket of lime plaster, painted and studded with gems. Among the antiquities found in the monastery was a half-charred manuscript of birch bark.

209 m. from Lahore is **Hassan Abdal** station (D.B.), famous for the so-called *Lalla Rookh's*¹ tomb, which is close by; also on account of the spring of *Baba Wali*, or, as the Sikhs call it, Panja Sahib. Baba Wali was a Musalman saint, and the legend is that Baba Nanak, the founder and Guru of the Sikhs, had a dispute with Baba Wali, and summoned the spring from the top to the bottom of the hill by placing his hand on the rock and invoking it. (The impression of Guru Nanak's hand is said to have remained ever since, and at one end of the tank there is a rude representation of a hand in relief on a rock, from underneath which the water flows into the tank.) This is one of those attractive places to which each religion in succession has attached its legends, and it has been appropriated in turn by Buddhist, Brahman, Muhammadan, and Sikh. The shrine of the Musalman saint Pir Wali Kandahari is on the peak of a lofty and precipitous hill, at the N.W. foot of which numerous springs of limpid water gush out of the ground.

The Panja Sahib is at the E. entrance to the town, on the right hand, about $\frac{1}{2}$ m. from the D.B. The road to it through the town passes through roughly-paved streets, and then leads down to a clear, rapid brook, crossed by stepping-stones. A Sikh temple has been constructed at the tank, which is a beautiful pool of water canopied with mulberry and pipal-trees of large size, and full of mahsir, some of them as big as a 15-lb. salmon. The walk now leads some 250 yds. along the stream, past some ruins of Jahan-gir, and past another pool, to Lalla Rookh's tomb, which is very plain, and stands in a garden surrounded by a wall, with four

slim towers, one at each corner; the enclosure is well filled with trees, amongst which is a cypress more than 50 ft. high.

From Hassan Abdal to Abbottabad (D.B.), 44 m. by metalled road; via Havelian. This is the motor road to Abbottabad. There is no regular tonga service.

Abbottabad is a pretty hill station, about 4000 ft. in elevation, the headquarters of a brigade of Gurkha Infantry and Mountain Artillery.

There is a metalled road through Abbottabad to Kashmir, *via* Domel, and, though there is no regular tonga service, the journey can be performed by tonga, if ordered in advance, or by motor.

A branch line of the N.W. Railway from **Saralkala** on the main line (Kala-ki-sarai) to Havelian, 9 m. from Abbottabad, has been completed. The shortest route to Abbottabad is now by tonga from Havelian.

The name of Abbottabad is derived from Major James Abbott, who (1849-53) pacified the district on its first annexation.

At Haripur, 20 m. from Hassan Abdal, is a memorial to Colonel Canara, who was killed defending his guns against the Sikh insurgents in 1848.

The following hill stations are reached from Abbottabad by roads not practicable for wheeled traffic:—

Thandiani . . .	16 m.
Nathialgali . . .	20 m.
Doongagali . . .	22 m.
Changlagali . . .	30 m.

There are hotels at Abbottabad, Doongagali, and Changlagali.

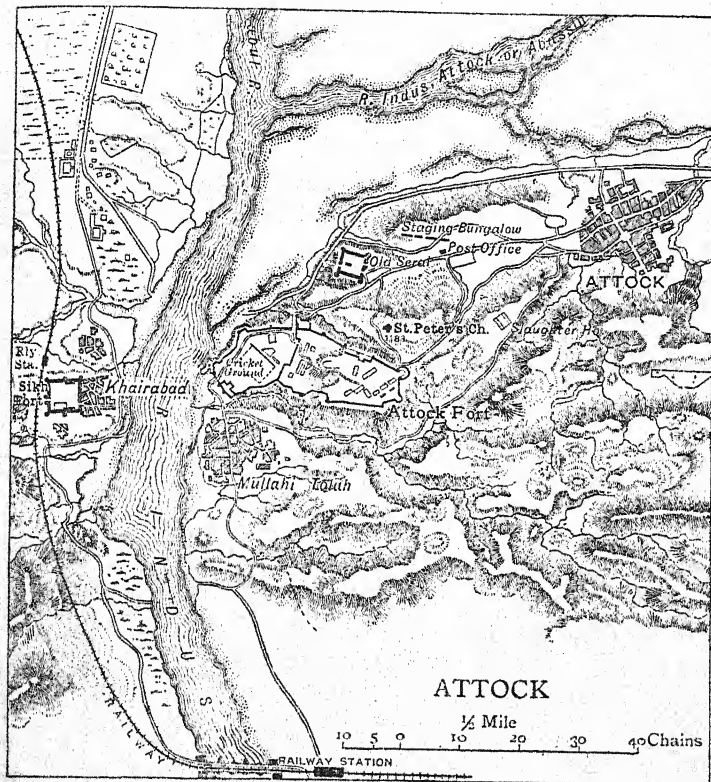
230 m. from Lahore is **Campbellpur**. There is a Cantonment here. Campbellpur is also the headquarters of the Attock district, and on the line to Kundian (p. 325).

¹ The last poem in *Lalla Rookh*, that of the "Fair Nurmahal," was recited by the disguised Prince at Hassan Abdal.

241 m. from Lahore is Attock Bridge station (D.B.), 1 m. below the town and fort. Attock is a small town (population 630) and fortress of some military importance. The railway crosses the

to rise 90 ft. in flood near the fort, where the channel becomes very narrow.

The Fort, situated on a commanding height, overhanging the E. bank of the Indus, and a little



Indus by a very fine *Iron Girder Bridge*, which was difficult to construct, owing to the rapidity of the current and the height above the water. The rails are on the top of the girders, and there is a passage for road traffic below. Each end is protected by a fortified gate. The river has been known

to the S. of the point where it receives the *Kabul River* on the W. bank, is very extensive, and has a most imposing appearance. It was built by the Emperor Akbar in 1586, who also established the ferry which it commands. Maharaja Ranjit Singh occupied the place in 1813, and it remained in

the hands of the Sikhs till the British conquest of 1849. It is now held by a small European detachment. Leave can be obtained to walk round the ramparts; this is well worth doing on account of the picturesque views to be obtained, which extend N.W. as far as the distant peaks of the Safed Koh.

To the N. of the fort is an old sarai, now in ruins.

A ravine to the S. divides the sarai from the higher hill on which the fort stands.

S. of the fort is another ravine, which separates it from the village of Mullahi Tola, the ferrymen's quarter.

The hills that line the river near Attock have old round towers and ruined forts dotted about them, and the Attock Fort, seen from them, resembles an ancient baronial castle. Some years ago a very strong fortified position was created on the hills on both sides of the river, but this fortification is probably now rather out of date.

Outside the fort, to the W., is the tomb of a Diwan of the saint Abdul-Kadir Gilani. It stands in a small enclosure on the edge of a cliff.

A trip by boat down the Indus to Khushalgarh, or to Kalabagh and Mari, will afford picturesque views of the deep, dark gorges of the Indus. Application should be made some days beforehand to the Deputy-Commissioner, Campbellpur, for a boat and crew for the voyage.

244 m. Khairabad station (R.), fine retrospect of a railway bridge and the Attock Fort.

261 m. Naushahra station (D.B.), is the headquarters of a subdivision of the same name in Peshawar District, on the right side of the Kabul River. The

Cantonment is on the banks of the river. About 2 m. distant on the Grand Trunk Road is a ruined fort built by the Sikhs.

From Naushahra a railway (2 ft. 6 in. gauge) runs past the modern cavalry Cantonment of Risalpur and (15 m.) Hoti Mardan to Dargai (40 m.), at the foot of the Malakand Pass, now a fortified position, which was the scene of severe fighting in the Chitral campaign of 1896 and in the subsequent rising of the Swat tribes. 10 m. beyond the Malakand crest, on the farther bank of the Swat River, is the Fort of Chakdarra, so desperately defended against the Swat tribes in 1897. The country round is full of ruined Buddhist remains and sculptures, of which many beautiful specimens were secured by Sir Harold Deane, late Chief Commissioner of the N.W. Frontier Province, and many of them are now to be seen in the museum at Peshawar.

Hoti Mardan, the headquarters of Queen Victoria's Own *Corps of Guides*. The officers' mess contains a very fine collection of Græco-Buddhist sculptures, partly found in the digging of the Swat Canal (see A. Foucher, *Sur la Frontière Indo-Afghane*, Paris, 1901).

7 m. N.E. of Hoti Mardan is the famous rock of Shabbazgarhi, 24 ft. by 10 ft., situated about 80 ft. up a slope, with one of the great Asoka inscriptions (Introd., p. lxxxii).

At 24 m. from Naushahra, at Takht-i-Bahai, an isolated hill rising 650 ft., are the remains of a Buddhist monastery (see Ferguson's *Indian Architecture*, I, 210), and another at Shahr-i-Bahlol at its foot. Shahr-i-Bahlol has been further excavated lately, and a large number of fine Buddhist carvings, images, and sculptures found there and at Takht-i-Bahai are in the Peshawar Museum.

274 m. Pabbi station. 23 m. from here is Cherat (D.B.), a hill Cantonment and sanatorium for Peshawar, 4500 ft. above sea-level. The temperature seldom exceeds 90° even in the hottest season. A tonga runs between Pabbi and Cherat twice daily in the hot weather.

285 m. Peshawar City station.

288 m. Peshawar Cantonment station * (D.B.), lat. 34° 1', long. 71° 37' (97,935 inhabitants, chiefly Muhammadans). This place, the headquarters of the first Army Division, the most important frontier city of India, and the residence of the Chief Commissioner of the N.W. Frontier Province, at present the Hon. Lieutenant-Colonel Sir G. Roos Keppel, K.C.I.E., is both interesting and picturesque. It stands upon a ridge above the plain, stretching towards the mountains, on the left bank of the Bara stream, 15½ m. S.W. of the junction of the Swat and Kabul Rivers, and 10½ m. E. of Jamrud Fort, at the entrance of the Khyber Pass. Kabul is 190 m. distant from here. The N.W. Frontier Province includes the Districts of Hazara, Peshawar, Kohat, Bannu, and Dera Ismail Khan, and the Agencies of Dir, Swat, and Chitral, Khyber, Kurram, Tochi, and Wana.

Peshawar is the ancient capital of the Gandhara Province, in which the Mahayana Buddhists (p. lxxxii) arose. To the E. of the city are the mounds of Shahjiki-dheri, covering ruins of the largest Buddhist stupa in all India (285 ft. from side-to side), in which a relic casket of King Kanishka, containing some of the ashes of Buddha, was discovered in 1909. This casket is now in the Peshawar Museum, which contains a number of treasures in sculpture. The Pathans made their appearance about the 8th century, and the present tribes settled in the 15th

century. Sabaktagin, Prince of Ghazni, conquered Raja Jaipal here in 978, and his more famous son Mahmud conquered this Prince again and his son Anandpol in 1001 and 1008, and Babar passed through it in 1519 A.D. The old name of Parashawar was changed by the Emperor Akbar, and till the reign of Aurangzeb the place was of great importance as commanding the route to the Mughal Province of Kabul. The houses of the city are built of small bricks or mud, held together by a wooden framework to protect them from earthquakes, and the streets are irregular and tortuous. The Edwardes, or Kabul, Gate leads to the main Kissa Kahani street. The *Ghor Khatri*, which stands high in the N.E. corner of the city, was successively a Buddhist monastery and Hindu temple, and is now the Tahsil. The C.M.S. has an important school in the city, and a pretty Mission Church; the Zenana Hospital is named after H.R.H. the late Duchess of Connaught. The C.M.S. has also opened a College in the Cantonment limits, a few paces to the N. of the Peshawar Cantonment station. Outside the city, N., is the square Bala Hissar Fort, with earthen walls 92 ft. high. From it and from the Ghor Khatri there is a very good view of the Peshawar Valley and hills. At the Bajauri Gate is a fine building used as a normal school. The cemeteries are very numerous, and quite surround the city.

The Islamia College has also been opened (in 1915) to the W. of the Peshawar Cantonment at a distance of nearly 3 m. on the Peshawar-Jamrud road, just opposite the Burj Hari Singh Police station: it is a very fine building. There is also a Zenana Hospital, maintained by the Peshawar Municipality, inside the city, quite close to the Hashtnagri Gate.

Peshawar has a great transit trade from Kabul and Bokhara

and Central Asia. The Bazaars are well worth a visit, both for the objects they contain—many of them not seen in Central India—and for the fierce-looking and picturesquely-dressed natives from Afghanistan and Central Asia.

The special manufacture of Peshawar is bright - coloured scarves, or *lungis*, worn as turbans. Waxcloth work and some ornamental needlework are also made here, as well as knives and small-arms; a special form of wood-carving also flourishes.

The Cantonments, 2 m. W. of the city, and $3\frac{1}{2}$ m. long by $1\frac{1}{4}$ m. broad, are situated on a slope towards the Khyber Pass. In them are a *Public Garden*, the Government House, and the Victoria Memorial building, now containing a museum of Buddhist remains. The museum has a very fine collection of Græco-Buddhist sculptures and other antiquities, most of which were excavated at Shahr-i-Bahlol and Takht-i-Bahai by Dr D. B. Spooner, who also arranged them on scientific lines and published an illustrated *Handbook to the Sculptures in the Peshawar Museum* (Bombay, 1910; R.1). The relic-casket of King Kanishka will be shown to visitors on application to the Curator. The main roads are lined with trees, and in the spring, when the roses and fruit-trees are in bloom and the fresh winter snows stand up grandly to the N. and W., the place is extremely beautiful. The lines of the native troops are situated at the Eastern and Western extremities of the Cantonment, and the barracks of the British troops in the centre. The Roman Catholic and Anglican Churches lie towards the W. end of the Mall, and the Club is close to the latter. Near the railway station is the grave of a *naugaza* (nine yard) saint. And near, at the E. end of the Mall, is an obelisk to the memory of Colonel Mackeson

C.B., Commissioner of the Peshawar Division, who was murdered by an Afghan in 1853. Farther on, beyond the pretty cricket-ground, were the District Courts, partly accommodated in the old Residency, and surrounded by a garden; the former have been moved to near the Jail, and the buildings are now used as military offices.

On the outbreak of the Mutiny in May 1857 Brigadier-General Sydney Cotton was in command at Peshawar, Colonel (afterwards Sir Herbert) Edwardes being Commissioner, and John Nicholson Deputy-Commissioner. These decided that the formation of a Movable Column was necessary. Sir John Lawrence approved of this, and the Column was at once constituted, under the command of Colonel Neville Chamberlain (afterwards Field-Marshal Sir Neville Chamberlain, G.C.B.), then commanding the Panjab Frontier Force, and later, under General Nicholson, was responsible for rendering harmless or destroying most of the dangerous mutinous elements still left in the Panjab. Besides the native troops in the Peshawar Cantonment, there were large numbers elsewhere in the valley, amounting in all to nearly 10,000, against which, fortunately, could be set a force of 2500 British at Peshawar and Naushahra. On the news of the half-hearted mutiny of the 55th Native Infantry at Naushahra on 21st May it was determined to disarm the native regiments in Peshawar, and this was quietly and effectually done at two separate parades on the 24th, under the rifles of a British regiment supported by guns. The Naushahra men allowed themselves to be led to Mardan, where two companies had already taken the place of the Guides marching to Delhi; and on a flying Column advancing from Peshawar, with John Nicholson as Political Officer, to disarm them,

the whole regiment broke away in wild flight to the hills, many being captured or killed on the way, and most of the rest perishing in Swat and Bönér.

There is capital *hunting* at Peshawar throughout the winter. The climate at this season is often very cold, and demands warm clothes.

(1) The Khyber Pass. — If permission can be obtained, this expedition should not be omitted, as no description can convey a real idea of the natural strength and wildness of the pass. Application must be made to the Political Agent, Khyber. A tonga can now proceed all the way to Ali Masjid, the farthest point to which visitors are allowed to go. The railway itself extends to Jamrud, and the tonga can be joined there if some train is convenient for this. The pass is open only on certain days in the week (on Tuesdays and Fridays during the winter: and only on Fridays during the summer), for the benefit of caravans, when it is guarded by the corps of *Khyber Rifles*—Afridis enlisted for the purpose. Several fortified posts, the chief of which are Ali Masjid and Landi Kotal (1700 ft. above sea-level), are held by them. Picturesque convoys of camels, oxen, and asses, heavily laden with well-poised loads, of goats and sheep, and of wild-looking men, women, and children, will be seen in the defiles.

The *Fort of Jamrud* (1670 ft.), 10½ m., was rebuilt by Sirdar Hari Singh, and gallantly held against the Afghans till April 1837, when he was killed in battle against troops sent by Dost Muhammad. Between it and Peshawar is Burj Hari Singh, near which the body of the fallen Sikh leader was cremated.

To the S. of the fort is the defensible post occupied by the Khyber Rifles here, and towards the hills on this side are seen a

large number of Afridi villages. The road first passes a small Muhammadan shrine with fine heads of Markhor placed on the tomb, and ascends a ravine to the crest known as Mackeson's Ridge, from which it descends again to the bed of the real Khyber stream, which enters the plains some way S. of Jamrud. From here the heights of Tartarra (6800 ft.), on the N. side of the real Khyber Pass, are finely seen, and, farther on, from the Shagai Ridge, the cliffs and fort of Ali Masjid (2433 ft.). The pass is exceedingly narrow, and is hemmed in by cliffs on either side, those on the Ali Masjid side being extremely fine. The road goes up the pass along the left bank, and above it runs through the desolate narrow valley of Lalabeg¹ till Landi Kotal (3373 ft.) is reached. From here a steep descent of 2000 ft. leads to Landi Khana, in Afghan territory, the boundary being 6 m. from the Kotal. A fine view of the valley, which runs from Dakka up to Jalalabad, named after Akbar, and renowned for its defence by Sir R. Sale from 12th November 1841 to 7th April 1842, is obtained from the Pisgah Peak (4500 ft.), to the N.W. of Landi Kotal.

The Khyber Pass, of which the Sikhs and the native troops of the British army had a great dread, was forced by General Pollock, with an army 8000 strong, early in April 1842, the heights on both sides being carefully crowned; and the same measures protected our army on its retirement in November of the same year. At the opening of the Second Afghan War, in November 1878, Ali Masjid was attacked by the force under General Sir Sam Browne on 21st November, and was deserted at night by the enemy. It was held by the Khyber Rifles from 1890-6, when it was allowed to be

¹ Below Ali Masjid and at Lalabeg are some Buddhist stupas.

taken by the Khyber tribesmen, and is now held again by the reconstituted Rifles; Landi Kotal is, however, the more important post. The Khyber Rifles, furnished by the various clans of the Afridis, now consist of one battalion of 1800 men under British officers.

The clans of the Khyber Afridis are the Zakka Khel, Kuki Khel, Malikdin, Kamrai, Kambar Khel, Sipah, and Aka Khel, numbering 20,000 fighting men. Besides these, this great tribe includes the Aka Khel and the Adam Khel, who are not directly connected with the Khyber Pass. N. of the Kabul River is the Mohmand tribe, and S. of Tirah are the Orakzais, separated from the Kohat district by the Samana Range.

(2) Bara (D.B.).—A visit may be paid to Bara (7 m.), from which place good water has now been brought to Peshawar in a conduit made of blocks of concrete. At intervals of $\frac{1}{2}$ m. there are small towers for ventilation. There is a mud fort at 6 m. S.W. of the Cantonment, close to the pass, from which the water comes. At Pusht-i-Khar, half-way between Peshawar and Bara, is an aqueduct bridge.

There are other forts at the mouths of passes into the hills—such as Michni, Shabkadar, and Abazai; but permission to visit them is necessary.

Abazai protects the headworks of the canal from the Swat River, which joins the Kabul River at Nisatha, 15 m. N.E. of Peshawar.

(3) Persons accustomed to a hard day in the saddle will enjoy a ride of 37 m. from Peshawar through the Kohat Pass to Kohat (1767 ft.), (D.B.), 5 m. from the S. base of the Tirah Mountains. The crest of the pass is 2800 ft. high.

There is a R.H. at Aimal Chabutra, 20 m. from Peshawar. Fort Mackeson lies on the left of the road, N. of Aimal Chabutra.

ROUTE 17.

KASHMIR, and some of the routes into that country.¹

General Description.—The *Valley* of Kashmir is an oval plain, some 84 m. in length and 20 m. to 25 m. in breadth, at an average height of about 6000 ft., and entirely surrounded by the lofty, snowy outer ranges of the Karakoram and Himalaya. Up to the end of May, and sometimes by the beginning of October, there is a continuous ring of snowy peaks around the valley, the principal being—N. of the Wular Lake, Nanga Parbat, 26,620 ft.; E., Haramukh, 16,900 ft., and Amarnath, 17,320 ft.; S., the Panjal range, with peaks of 15,000 ft.; and W., Kazi Nag, 12,125 ft. These are all visible from the valley. Farther distant, but still in the territory of Lieutenant-General His Highness Maharaja Sir Pratap Singh Bahadur, of Jammu and Kashmir, G.C.S.I., G.C.I.E., G.B.E., are many peaks of over 20,000 ft., the highest of which is probably Mount Godwin Austen, 28,278 ft. In the Chitral State, about 200 m. N.W. of Srinagar, is the peak Agram, 25,426 ft., in the Hindu Kush range.

The Valley of Kashmir is watered by the Jhelum and its tributaries, which find an outlet in the gorge at Baramula, and finally join the Chenab and Indus in the Panjab. The soil is fertile. Rice and maize are the chief crops; then come wheat, barley, and orchard or garden produce. The saffron (*Crocus sativus*) is famous

¹ The best guide-book of Kashmir is that by Dr Arthur Neve. Lieut.-Colonel J Duke's Guide, since revised by the author, may also be commended.

for its bouquet, and its cultivation is an ancient industry. The floating gardens of the Dal Lake are made of long strips of the lake reed, which are moored at the four corners by poles driven into the lake bed, heaps of weed and mud being then formed into small cones on the reeds. Melons, tomatoes, and cucumbers grow upon these cones with astonishing vigour. The *singhara*, or water chestnut, grows wild in the Wular and Dal lakes; the kernel, which is white and mealy, is either ground into flour or parched, and so eaten. All the fruits and vegetables of temperate climes grow well in the valley. The mulberry, bitter cherry, plum, apple, pear, grape, walnut, and pomegranate are indigenous; the apricot and peach have spread all over the valley since their introduction. The forest trees grow to a great size. The principal among them are the deodar (the best, but not common), the blue pine, spruce, and silver fir, the elm, walnut, poplar, maple, willow, mulberry, horse-chestnut, and plane (or *chenar*), which is the special glory of the valley.

The climate is delightful in the early summer. In July and August, although the thermometer does not usually rise above 90°, the stillness of the air causes the heat to be oppressive in the valley, and then the mosquitoes make up for their comparatively mild sting by their enormous numbers. At this period visitors are glad to ascend to the upland plateaux—Gulmarg, Sonamarg (in the Sind Valley), Nagmarg, Pailgam (at the head of the Liddar Valley), and Gurais. The pleasantest months in Srinagar, with a latitude of 34° 5' N., are April, May, June, October, and November. The spring months are showery, July and August are sometimes rainy, and the snows set in about Christmas time. The cold in winter is sometimes severe.

In 1890-1 the thermometer fell below zero. In January and February 1893, and in 1915, there was skating all over the Dal Lake.

One of the latest writers, Sir Walter Lawrence, says: "The valley contains nearly everything which should make life enjoyable. There is sport, varied and excellent, there is scenery for the artist and layman, mountains for the mountaineer, flowers for the botanist, a vast field for the geologist, and magnificent ruins for the archæologist. The epicure will find dainty fruits and vegetables cheaper here than perhaps in any part of the world, while the lounge can pass delightful days of *dolce far niente* in the mat house-boats moored under the shady *chenar-tree*."

The population of the valley is 1,100,000, of whom 126,000 inhabit the capital, Srinagar. The Muhammadans number about 1,035,000 and the Hindus about 64,900.

History.—For many centuries Kashmir was ruled by Scythian Hindu Princes, who were succeeded by Tartars. In 1586 the country was conquered by the great Mughal Akbar and annexed to his Indian Empire. Akbar built the fort on Hari Parbat Hill. His successor, Jahangir, made many expeditions to Kashmir, where he planted *chenar*-trees, and constructed lovely pleasure-gardens. In 1753 Kashmir passed into the hands of the Durani Chiefs from Kabul, and in 1819 Maharaja Ranjit Singh's general, Misr Chand, defeated the Pathan Governor, Jabbar Khan, and annexed the country. In 1846, on the close of the First Sikh War, Kashmir was assigned by treaty to Maharaja Gulab Singh.

Antiquities.—The chief ruins of Kashmir are those at Buniar, Patan, Pandrathan, Payech, Avantipur, Martand, and Wanganat. They exhibit traces of Greek

influence, and are of great archaeological interest (see Fergusson's *Indian Architecture*, I, 251-272).

The Coins of Kashmir (now obsolete) are worthy of notice.¹

There are many Routes into Kashmir, mostly from the S. and W. The following are the most frequented:—

1. From Rawalpindi *via* Murree (p. 330) and the Baramula Pass.
2. From Gujarat (p. 324) *via* Bhimbar and Pir Panjal (see p. 348).
3. From Jhelum (p. 327) *via* Punch (see p. 349).
4. From Hassan Abdal (p. 334) *via* Abbottabad (p. 334).
5. From Jammu (p. 324) (see p. 350).

(i) *Murree Route to Kashmir.*

Rawalpindi

By tonga to

25½ m. Tret (D.B.)	<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;">From Murree there is a short cut (bridle-path) to Kohala <i>via</i> Dewal, 18 m. instead of 29 m.</div> </div> </div>
36½ m. Sunny Bank	
39½ m. Murree (Hotel)	
64½ m. Kohala (D.B.)	
76 m. Dulai (D.B.)	
85½ m. Domel (D.B.)	
98½ m. Garhi (D.B.)	
109½ m. Hattian	
115 m. Chenari (D.B.)	
120 m. 20 ch. Chakothi (D.B.)	
133 m. 33 ch. Uri (D.B.)	
147 m. 20 ch. Rampur (D.B.)	
162 m. 21 ch. Baramula (D.B.)	
197 m. 1 ch. Srinagar (D.B.) ²	

The above are easy stages. There is a D.B. at every stage (except Hattian) with a Khan-sama and European supplies.

¹ The best book on the subject is *Coins of Kashmir*, by Mr Rogers of Amritsar.

² If the traveller intends to go beyond Srinagar, it will be necessary for him to get a camp kit, ponies, etc. All this can be arranged at Srinagar, or by writing beforehand to Cockburn's Agency, or the "Kashmir General Agency," Srinagar. The ponies are procured from the Motamid Darbar.

The usual time for the journey is three days, but it can be accomplished in two days by motor from Rawalpindi.

It is advisable to spend a day at Rawalpindi or Murree to make arrangements for the journey.

The road is well metalled all the way, though liable to interruptions from landslips in wet weather.

Fare for *Tonga*—three seats, Rs.124; one seat, Rs.41, 8 as. Tongas do not travel by night. *Ekkas* can be procured for servants or baggage for Rs.32. These prices are from Rawalpindi to Srinagar. Apply to Messrs Dhanjibhoy, Rawalpindi. The head of the firm is Mr Sorabji C. Dhanjibhoy, C.I.E.

If the traveller intends to march into Kashmir by stages, he can engage coolies at 6 as. a stage, baggage ponies at 12 as. a stage, and riding ponies with saddles at Rs.2 a stage. There is also a motor-car service between Rawalpindi and Srinagar.

The road ascends steadily from Barakao to (25 m.) Tret (4000 ft.) and to (36½ m.) Sunny Bank.

39½ m. Murree* (see p. 330) (7700 ft.), and then the road descends until the *Jhelum River* is reached at Kohala.

27½ m. from Sunny Bank is Kohala (2000 ft.) (D.B. good). The bridle-path by Dewal from Murree to Kohala is 11 m. shorter than the tonga route. The road along the Jhelum Valley is hot in the summer months, so that travelling in the early morning or evening will be found the most agreeable. In addition to the very fine near scenery along this road, grand views of the snows may be obtained in April and May.

After crossing the river by a lattice-girder bridge, built in 1905, where toll is levied, the road ascends the left bank all the way to

Baramula. There is a good picturesque little D.B. at Dulai.

11 $\frac{1}{4}$ m. on is Dulai. From here the road is cut in the face of the cliff, and is liable to be blocked by landslips after rain.

9 $\frac{1}{2}$ m. on to Domel (D.B.), where the route from Hassan Abdal (Route 4 below) joins in (left). Here the road turns E. at an acute angle, where the Jhelum is joined by the Kishanganga. About 1 m. N. is seen the town of Muzaffarabad, with one or two temples, and beyond it is the Sikh fort.

12 $\frac{1}{4}$ m. to Garhi (D.B. good). Late in the afternoon this march is shaded by the high hills.

11 m. to Hattian. The scenery is bolder and more beautiful.

11 m. 7 ch. to Chakothi (D.B.). There is a swing bridge below the bungalow. Soon after leaving Chakothi the ruins of a mosque are passed, the carving of which was copied and sent to London for the Colonial Exhibition.

13 m. 13 ch. to Uri (D.B. good). The *Hajipir* River, which falls into the Jhelum from the S., is here crossed. For the sake of the gradient the road makes a long detour. The road to Punch *via* Haji pir Pass, 14 $\frac{1}{2}$ m. to the pass, branches off at 71 m. of the Jhelum Valley Road.

142 $\frac{1}{2}$ m. from Rawalpindi, between Uri and Rampur, is the Water-power Station of the scheme which provides the electric power used in Kashmir.

13 m. to Rampur (D.B. good). From here the road is comparatively level. An ancient temple is passed at Buniar, standing in a fine cloister, one of the most complete and interesting of all in

Kashmir, and then the fort and village of Naushahra.

The head works, from which the water is taken out of the Jhelum and carried to the reservoir about the Power Station, are at 150 m. from Rawalpindi, about 3 m. beyond Rampur and 12 m. before Baramula.

15 m. 1 ch. to Baramula (D.B. good). Here Kashmir dongas, or house-boats, can be procured for the life on the river; if it is desired to make the journey on to Srinagar by such a boat, it is best to arrange for one beforehand through the above Agents. The larger dongas may be hired for Rs.20 a month (they let at anything up to Rs.30 per month); the smaller, generally used for kitchen and servants, cost Rs.15 a month. These prices include four boat people to each boat. English house-boats cost Rs.30 to Rs.150 a month, according to accommodation and whether furnished or not, or from Rs.200 to Rs.400 for the season, exclusive of the wages of the crew. Some of them have every comfort.

On leaving Baramula by boat Sopor is passed at the entrance to the Wular Lake. Fair mahsir fishing may be obtained here. Sopor is the starting-point for the Lolab Valley and Nagmarg. When the river is high boats go from Sopor to Shadipore by the Noor Canal. If the water is insufficient for the canal, the Wular Lake should be crossed early in the day, as dangerous storms sometimes arise later. The Wular Lake is the largest in India, being 12 $\frac{1}{2}$ m. long by 5 m. broad. From the Wular the boats join the river by a small canal, which leaves the river at Hajin. 5 m. N. of this is the Lanka Island, with the ruins of an old temple. 6 m. up stream from Hajin is Sambal. This is the starting-point for the trip by boat to the exquisitely beautiful Manasbal Lake, with an old temple

immersed in the water at the S.E. end of it. Shadipore is 4 m. up the river from Sambal, and Srinagar about 14 m. farther by the river. From Baramula to Srinagar by the Noor Canal takes little more than one day; by the Wular Lake, two to three days.

From Baramula the traveller can go by boat up the Pohru River to Sunawin, the next day to Kulangam, and the third day, if the river is full, to Awatkoola. (very pretty scenery). Sending the boat back to Sopor, a pleasant march may be made through the Lolab Valley as follows: Awatkoola to *Koopwara* (8 m.); to *Lalpur* (12 m.), the capital of the Lolab Valley; to *Harwan* (9 m.); back to *Sopor* (10 m.); and then on to Srinagar, as above. The Lolab Valley is very pretty, and the marches easy. Formerly black bears were numerous, especially during the mulberry season, but they are not now so common.

The journey by tonga from Baramula to Srinagar (34 m.) occupies 4½ hours. At 16 m. from Baramula is Patan, in which are ruins of two temples of the 9th century.

Srinagar * (erroneously derived from Suryanagar), lat. 34° 5', long. 74° 51', 5250 ft. above sea-level, is the capital of Kashmir State. It is beautifully situated in the centre of the "Happy Valley," has a population of 126,300, and is divided into two parts by the River *Jhelum*, along the banks of which it stretches for nearly 2 m. The river is crossed by quaint wooden bridges, but the first of these is rebuilt on masonry abutments and piers, and its banks are lined with carved blocks of limestone, now, unfortunately, much defaced by time and neglect.

The city, traversed by canals, was built by the Raja Pravarasen in the 6th century, and consists chiefly of wooden houses, some of them several storeys high, sur-

mounted by sloping roofs covered with earth. Within the *Sher Garhi*, formerly surrounded by massive walls containing the city fort, is the *summer residence* of the Maharaja. The *Jami Masjid*, near the Mar Nulla, is of considerable size, and of interest as being designed to be constructed in wood. All the pillars which support the cloisters of the courtyard are of deodar pine, "honest wooden forms," with the remains of rich and beautiful carving. There is another wooden mosque in the city, the *Shah Hamadan*, the roof of which is probably similar to that which covered the Temple of Martand. Not far from it, on the opposite (left) bank of the river, is the stone mosque built by Nurjahan, wife of the Emperor Jahangir, while below the fourth bridge is the tomb of Zainul-abidin. His Highness has constructed a Zenana Hospital in the city in memory of the Diamond Jubilee of the late Queen-Empress.

A fine view of the city and its neighbourhood is obtained from the top of the *Takht-i-Sulaiman* ("Throne of Solomon"), 6263 ft., —i.e., 987 ft. above the city—where there is a fine stone temple, said to be of great antiquity, but in its present form probably not earlier than the 16th century. The road to it lay along a famous poplar avenue, more than 1 m. in length; but this was cut down some years ago. The *Hari Parbat*, an isolated hill on the N. outskirts of the city and 250 ft. above it, should also be ascended. It is surrounded by an extensive wall, and surmounted by the *Fort*, built by Akbar at the end of the 16th century.

Many good subjects for the artist may be found in Srinagar, but the smells in the town are often very trying.

The chief industries are those of the wood-carvers, shawl-makers, gold, silver, and copper smiths, papier-mâché makers, leather

workers, and dealers in precious stones.

The Residency and the European quarter lie above the city and the highest bridge on the river. In the centre of the quarter is a fine ground for cricket and polo, provided by the Maharaja; on the N. side of this is Nedou's Hotel; and at the N.E. corner is the Takht-i-Sulaiman, with the entrance to the Dal Lake at its foot, not far from the C.M. Hospital. As a matter of etiquette, a call should be paid by visitors on the Resident.

EXCURSIONS.

(1) The first excursion should be to the Dal Lake, which is close to Srinagar, on the N.E., and is one of the most beautiful spots in the world. The lake is about 4 m. long and $2\frac{1}{2}$ m. broad. Skirting the W. and N. sides of the Takht-i-Sulaiman from the Dal Gate, and passing through a stretch of floating gardens, the Nishat Bagh will be first reached on the E. side of the lake. The terraces in this, the flights of steps ascending them, and the water falling down them are extremely beautiful, and the first afford delightful glimpses of the lake. 2 m. farther on is the Shalimar Bagh, built by Jahangir, who lived there in the summer months with Nurjahan, "The Light of the Harem." They are fully described by Bernier. In crossing the lake to the W. side a fine view is obtained of the mountains behind these two gardens. Beyond a small island with chenar-trees lies the Nasim Bagh, a delightful, fine, park-like expanse, closely planted with magnificent chenar-trees. Well raised above the lake, it catches the breeze, whence its name is derived. On the way back to Srinagar is passed a village with a large mosque, called Hazrat Bal; farther

on is a fine view of the picturesque Hari Parbat, from which the Nasim Bagh Canal leads to the Dal Gate. The name of Hazrat Bal is derived from a hair of the Prophet Muhammad, believed to be preserved in the mosque.

The Eastern shores of the lake may also be reached on foot. Starting from the Munshi Bagh, the road leads S. of the Takht-i-Sulaiman to the edge of the lake. To the left is a wine factory. A massive building, high up the mountain-side farther on, is the Pari Mahal, probably originally erected for astrological purposes. Beyond are vineyards, and then, higher up, the Chashma Shahi, a garden of the usual Mughal plan. The Nishat Bagh is 2 m. farther, 5 m. in all from the Munshi Bagh, and Shalimar 2 m. beyond that.

(2) Starting again from the Dal Gate, below the C.M.S. Mission Hospital, and turning to the left, the Mar Nulla leads through the Northern side of the city to the W. of Hari Parbat and the Anchar Jhil, across which a boat can proceed to Gandarbal, 14 m. from Srinagar. Beyond the Dilawar Khan Bagh the canal passes under a series of bridges and balconied houses, and affords some of the most picturesque, but often, also, the most malodorous, views in the whole city. Near the end of it is the Idgah. From outside the Dal sluice-gate the Tsont-i-Kul, or Apple Canal, leads past the Chenarbagh (one of the prettiest spots near Srinagar, but by no means a healthy one to camp on) to the river opposite the Sher Garhi, presenting varied and beautiful views all the way. Both of these expeditions may be often repeated with increased pleasure.

(3) The Temple of Pandrethan lies about 3 m. E. of the Residency by road, but very much farther by boat, owing to the loops of the river above Srinagar, which form so singular a feature in the views

from the Takht-i-Sulaiman. It is about 18 ft. square and 30 ft. high, and is now surrounded by water, owing to the bursting of several springs in its courtyard. The beauty of the temple lies in its proportions, in the excellent sculptures of the interior, and in the trefoil-headed arches and roof which form the chief characteristics of the Kashmir style, unknown elsewhere, except in a few out-of-the-way places in the Panjab. The temple was built about 900 A.D. and dedicated to Siva. On the N. side of the tank are some broken remains, including a square pillar with figures on each side of it.

(4) *Islamabad, Martand, Vernag*, and the *Liddar Valley*. Proceeding by boat up the river, and passing *Pandrethan* and (8 m.), *Pampur*, *Kakapur*, the starting-place for the Temple of Payar, is reached 6 m. farther on. This tiny temple (only 8 ft. square) is in excellent preservation, and, being complete, gives a good idea of what the beauty and elegance of the larger temples must have been. It is constructed of eight stones only, and is dedicated to Siva. Its date is about the 9th century A.D. In the interior is a large stone *lingam*.

About 6 m. above *Kakapur* is *Avantipur*, once a famous city and the capital of King Avantivarman, who reigned 855 to 883 A.D. Two of the temples built by him are still extant, a smaller and more ornate one of Vishnu-Avantisvami near the village of Avantipur, and a larger one of Siva-Avantisvara about $\frac{1}{2}$ m. along the road to Srinagar. Both temples have recently been excavated, and the former, with its sculptured base, its handsome gateway and well-preserved peristyle, is now one of the most striking and interesting monuments in Kashmir. About 10 m. farther is *Bijbehara*, where there are fair fishing, and a good encamping-ground above the town and bridge. From here it is 4 m.

to *Kanbal* for *Islamabad*, the second town in Kashmir, with 9000¹ inhabitants, and originally the capital of the valley. The springs in the town are exceedingly picturesque, and the *Wazir Bagh*, to the S. of it, is a pretty place to camp in. From *Islamabad* it is necessary to proceed by road to the *Ruins of Martand*, which are $5\frac{1}{2}$ m. N.E., and stand isolated on an elevated plateau above the valley. The temple, which is the largest in Kashmir—being 63 ft. long—is also the finest example of the ancient Kashmiri style of architecture, which is remarkable for its quasi-classical features—derived, no doubt, from the earlier Indo-Hellenistic art of *Taxila* and the North-West. Its date is not certain, but there are good reasons for ascribing it to the reign of *Lalitaditya* (8th century A.D.). It was largely destroyed by *Sikandar*, and has since suffered much from neglect. There seems to be no foundation for the story, told by the local guides, that a spring used to issue from the floor in the sanctum.

From *Martand* a path leads to (5 m.) *Achibal* (7 m. from *Islamabad*), with its beautiful streams and cascades, groves of magnificent chenar-trees, and the old pleasure-garden of *Jahangir*. There is a bungalow for visitors and an excellent camping-ground.

From *Achibal* a path leads *via Shahabad* to (13 m.) *Vernag*. Here are the celebrated springs, the source of the River *Jhelum*, which rises in an octagonal tank in a garden near the foot of the *Banihal Pass* (9763 ft.). One of the recesses of the enclosure round the tank bears an inscription by *Jahangir*. This spot was a favourite haunt of his empress *Nurjahan*. The tank is full of sacred fish.

2 m. E. of *Martand*, in the lowlands of the valley, is *Bawan*,

¹ Neve says 20,000.

where there are celebrated chenars and tanks and excellent camping-grounds. From here it is $9\frac{1}{2}$ m. up the Liddar Valley to *Eishmakam*, where there is an old ziarat, from which a fine view is obtained. The next march reaches (13 m.) *Pahlgam* (8500 ft.), a favourite summer resort, with good camping-ground under the pines.

From *Pahlgam* an expedition may be made farther up the valley to (7 m.) *Thanin*, or *Chandanwari* (10,500 ft.), whence it is a stiff climb to (6 m.) *Shisha Nag* (13,000 ft.), a fine sheet of water covered with ice till the month of June. From *Shisha Nag* it is 11 m. to the *Amarnath Cave*, but the path is not easy, and should be attempted by experienced mountaineers only. The cave is a famous resort of pilgrims.

From *Pahlgam* another route leads N. through *Aru* and *Liddar* into the *Sind Valley*. This route also is not an easy one, and as it ascends over 14,000 ft., it is often under snow till July. The descent into the *Sind Valley* may be made either to *Sakwas* or *Surphraw*, near *Gund* (see below).

(5) Another beautiful expedition may be made from *Srinagar* up the *Sind Valley*. The first stage is either by boat or by land to (14 m.) *Gandarbal*, a small village at the mouth of the valley. *Gandarbal* is 9 m. by road from the *Nasim Bagh*, in the *Dal Lake*. From *Gandarbal* the marches up the valley are—to *Kangan* (11 m.), to *Gund* (13 m.), to *Gagangair* (8 m.), and *Sonamarg* (7 m. Telegraph Office; 6 m. camping-ground). From *Kangan* a detour may be made N. to (8 m.) the temples of *Wangat*, or *Naghal*, placed in an exceedingly beautiful situation above the stream, and now the most picturesque of all the ruined temples of *Kashmir*. The route from *Gund* onwards is extremely beautiful, and the torrent pass, in which small snow glaciers will have to be crossed

early in the season, leading up to *Sonamarg*, is extraordinarily fine. *Sonamarg* (8500 ft.) contains lovely meadows, and was once the chief sanatorium of *Kashmir*. The next stage, *Baltal* ($9\frac{1}{2}$ m. from camping-ground, 9282 ft.), is at the foot of the *Zojila Pass* (11,300 ft.), which leads to *Dras*, and thence to *Leh*, the capital of *Ladakh* (nineteen marches from *Srinagar*). From *Baltal* the *Cave of Amarnath* (see above) may be reached in the spring or early summer before the snow bridges have melted. Provisions are not easily obtained in the *Sind Valley*, and there are no bungalows.

(6) There are several routes from *Srinagar* to *Gulmarg*, * the favourite resort when the valley becomes hot, but the best is by road and tonga to (a) *Margan* (D.B.), $14\frac{1}{2}$ m., and (b) to the foot of the final ascent, $9\frac{1}{2}$ m., whence it is over 4 m. on to the plateau itself. The other possible routes are—

1. By boat to *Palhallan*, then by road, 17 m.
2. By boat to *Sopor*, then by road, 22 m.
3. By boat to *Baramula*, then by road, 15 m.

Gulmarg (or “Meadow of Roses”) is a lovely, but somewhat rainy, spot at an elevation of 8500 ft. Above it is the ridge of the *Firozpur Pass* and the *Apharwat Mountain*, 14,500 ft. The fine, snowy peak of *Nanga Parbat*, nearly 26,600 ft., is beautifully seen. *Gulmarg* offers the attractions of polo, cricket, golf, and other amusements.

(2) *Pir Panjal Route to Kashmir.*

Riding
or on foot. Gujarat to

28 m. *Bhimbar* (D.B.)

39 m. *Saidabad* (D.B.), crossing
Aditak Range.

49 m. *Naushahra* (D.B.)

Jhelum and Punch Route to Kashmir.

Jhelum to

13 m. Shikarpur	89 m. Sahri.
(D.B.)	105 m. Punch
26 m. Tangrot	(D.B.)
(D.B.)	115 m. Kahuta
36 m. Chaumukh.	(D.B.)
46 m. Raidani.	130 m. Hyder-
58 m. Neki.	abad (D.B.)
66 m. Berarli.	140 m. Uri.
74 m. Kotli.	

This route is long, the marches are somewhat difficult, and supplies scarce. Owing to the steepness of the road in places the traveller is recommended to take coolies rather than ponies.

Jhelum (p. 327).

13 m. Shikarpur (D.B.) The road is unmetalled, but in good order and level the whole way.

13 m. Tangrot (D.B.). The road lies, for the most part, in the bed of the Jhelum, so can only be used when the river is low. The fishing here is probably the best in India.

10 m. Chaumukh, crossing the Punch by a ferry. The ascent is by a very rough path (only walking being possible) to the village of

10 m. Raidani, prettily situated in a valley. Thence by the worst march in the route to

12 m. Neki, which is the residence of a few cowherds. No supplies obtainable.

8 m. Berarli, a small village, where there is good spring water, and supplies and coolies plentiful.

8 m. Kotli, on the left bank of the Punch. The camping-ground is through the town, under some trees, among a lot of streams working twenty flour mills. Supplies, coolies, ponies, etc., abundant.

15 m. Sahri, where black partridges abound. The scenery here is very pretty.

16 m. Punch (D.B.), a largish town, on the right bank of the Sooran, the conspicuous features of which are the *Raja Buldeo Singh's Palace* and the *Fort*. Punch may also be reached in three marches—Sooran, 16 m.; Sahri, 11 m.—from Thana Mandi. (p. 348).

10 m. Kahuta (D.B.), a cluster of huts up the Bitarh Valley, commanding a magnificent view of the surrounding mountains.

8 m. to Aliabad, where there is a comfortable R.H.; some supplies are obtainable.

6 m. Hyderabad (D.B.), a small mountain village beyond the Haji Pir Pass (8500 ft.), where supplies are very scarce.

9½ m. Uri, thence (see p. 343) to Baramula and Srinagar.

(4) *Hassan Abdal and Abbottabad Route to Kashmir.*

12 m. Dedur (D.B.).

8 m. Haripur (D.B.).

22 m. Abbottabad (D.B.).

16 m. Mansera (D.B.).

18 m. Garhi Habibulla (D.B.).

14 m. Domel (D.B.).

(For continuation *via* Uri, see p. 343.)

The stages to Abbottabad can be done by tonga. The road from Abbottabad is a fair one, and is being gradually improved.

Hassan Abdal (D.B.) (p. 334).

12 m. Dedur (R.H.), a roadside sarai and camping-ground.

20 m. Haripur (D.B.), a large and flourishing Indian town, lying in a richly-cultivated valley.

42 m. Abbottabad (D.B.) (p. 334).

58 m. Mansera (D.B.).

76 m. Garhi Habibulla (D.B.).

88 m. Domel (D.B.), thence to Garhi, Uri, etc. (p. 343).

(5) *Jammu* (p. 324) to *Srinagar*.

This route (now being widened into a cart-road) is practically the private one of the Maharaja, and travellers are not permitted to use it except with special permission from the Resident in Kashmir—winter-headquarters at Sialkot. It is 184 m. long, divided into nineteen stages, and crosses the Chenab near Ramband and the Banihal Pass (9000 ft.) above Vernag (p. 346). Should an electric railway to Kashmir be ever made, the circuit of the country may be completed by a prolongation along this route.

ROUTE 18.

(a) REWARI to Hissar, Bhatinda, Ferozepore; Kasur, Raiwind, LAHORE.

(b) LAHORE to KARACHI by Multan, Sher Shah Junction, Bahawalpur, Samasata, Rohri Khairpur, Hyderabad, and Kotri, with expeditions by road from Jangshahi to Tatta, and from Rohri to Sukkur, Ruk Junction, Larkana, Sehwan, and Kotri, by the right bank of the Indus.

The journey Lahore to Karachi (784 m.) occupies 24½ hrs.

Fares—Rs. 58, Rs. 29, Rs. 9.

General Note on Sind.

Shikaris and camels cannot be obtained without previous notice. It is advisable to invite the assistance of the Collector of the District. The railway runs through the following Districts:—Sukkur, Larkana, Nawab Shah, Hyderabad, and Karachi. The beaters and camel men are all keen sportsmen, but the tariff should be arranged before starting. Camels cost about R.1, 8 as. per day, beaters 4 as. to 8 as. In nearly all parts of Sind there is good small-game shooting—duck, quail, snipe and black partridge—and a good shot may get fifty brace of duck or snipe on a lucky day, and frequently twenty to thirty brace. A pleasant trip can be obtained by hiring a country boat at Sukkur or Kotri and sailing down the Indus, the shooting-grounds being generally most accessible from the river: in this manner crocodiles, pig, hog-deer, and many varieties of water-birds—*e.g.*, pelicans, flamingoes, and spoonbills—can be added to the bag.

(a) Rewari to Lahore.

52 m. from Delhi is Rewari junction station (R., D.B. and Hindu-Muhammadan Hotel). Rewari was founded in 1000 A.D. by Raja Rawat. There are the ruins of a still older town E. of the modern walls. The Rajas of Rewari were partially independent, even under the Mughals. Near the town they built the mud fort of Gokalgarh, which is now in ruins, but was once very strong. They coined their own money, and their currency was called Gokal Sikka. Rewari is a place of considerable trade, particularly in iron and brass. The Town Hall is handsome, as are the Jain Temples and Tej Singh's Tank, close to the town. Beyond Rewari the railway passes to

30 m. S.W. of Rewari lies Nar-naul, the principal town of the possessions of the Patiala State in this quarter, made over to the State for loyal services rendered in 1857. This is on the Chord line from here to Phalera (p. 192).

From Rewari a branch of the narrow-gauge line runs N.W. to Hissar and Ferozepore, and so to Lahore, passing the following places.

52 m. Bhiwani station (R.H.), with 31,100 people, chiefly Hindus, formerly a great market for all North Rajputana.

74 m. Hansi station (D.B.), a modern town of 14,576 inhabitants, on the W. Jumna Canal. It is said to have been founded by Anangpal Tomar, King of Delhi, and was long the capital of Hari-ana. There are ruins of an ancient citadel and some remains of gateways, and a high brick wall, with bastions and loop-holes. In 1795 the famous sailor-adventurer, George Thomas, fixed his headquarters at Hansi, which forthwith began to revive. In 1802 British rule was established and

a local levy was stationed here, and Colonel Skinner, C.B., settled in 1829. In 1857 the troops of this town mutinied, following the mutineers at Hissar.

At Tosham (D.B.), 23 m. S.W., are some ancient inscriptions. They are cut in the rock half the way up the hill near a tank much visited by pilgrims who come from great distances to the yearly fair there. Tosham (population, 2325), is about 9 m. from the Bawani Khara Railway Station.

89 m. Hissar station (R., D.B.) (population 17,162). The Hissar branch of the W. Jumna Canal, made originally by the Emperor Firoz Shah to irrigate his hunting-seat at this place, terminates here. In 1826 it was restored by the British. In this place also the local levies revolted during the Mutiny of 1857, and murdered the Collector and fourteen Christians, to whom a monument is erected beside the little Church; but before Delhi was taken a body of Sikh levies, aided by contingents from Patiala and Bikaner, under General Van Cortlandt, had restored order.

The city and the fort on the W. side of it were founded in 1354 A.D. by the Emperor Firoz Shah, who made it his favourite hunting-seat. Lying on the main track from Multan to Delhi, it became a place of importance, of which there are only buried remains now besides the old walls and gates. In the fort are the ruins of a Muhammadan building constructed of Jain remains; and E. of the city is a fine stone building called the Jahaz, or Ship, from its shape. It was used as a workshop of the W. Jumna Canal, but has now been made over to the Archæological authorities. A large cattle fair is held at Hissar twice a year. S. and W. of the city there is a Government cattle-farm (*Bir*), managed by a European superin-

tendent, and attached to it is an estate of 39,887 acres for pasturage.

The *District of Hissar* borders on the Rajputana Desert, and in parts is itself little better than a waste, scattered over with low bushes. The water supply is inadequate, the average rainfall being only 10 in., and the country is sadly subject to famines. The *Ghaggar*, with scant verdure along its banks, winds through the N. of the district like a green riband.

140 m. *Sirsa* station (population 14,629). The town and fort are supposed to have been founded by one Raja Saras about the middle of the 6th century. It was formerly well known as *Sarasvati*. A great cattle fair is held here in August and September, at which 30,000 head of cattle are exposed for sale.

187 m. *Bhatinda* junction station. From this place lines run E. to Patiala, Rajpura, and Ambala, and W. to Samasata (Bahawalpur), Hyderabad, and Karachi, S.E. to Rohtak and Delhi, and S. to Bikaner. There is a very high picturesque fort, seen well from the railway, but the modern town contains nothing of special interest except the shrine of Baba Ratan, a Moslem saint who is said to have been a Hindu converted to Islam in the reign of Shahab-ud-din Ghori (c. 1200 A.D.), and yet is believed to have lived in the days of the Prophet.

213 m. from Rewari is *Kotkapura* (R.), a town in the *Faridkot* State, in the Panjab, situated 7 m. from *Faridkot* town, on the *Ferozepore-Bhatinda* branch of the North-Western Railway, and also on the *Rajputana-Malwa* narrow-gauge line, which runs W. from *Kotkapura* to the terminus at *Fazilka*. The town has a considerable trade in grain, and a fine market

known as the "*Bikram*" *Mandi*. Hackney carriages are available at the railway station.

219 m. from Delhi is *Faridkot* town (population 11,673), capital of the Sikh State of that name. The Chief is of the same tribe, but of a different Jat family from those of the *Phulkian* States (p. 296). *Chaudhri Kapura* founded the *Faridkot* house in the middle of the 16th century, and his grandson, *Sardar Hamir Sing*, became independent a century later, having added considerably to the family possessions. *Maharaja Ranjit Sing* took possession of the State in 1807, but was forced to relinquish it with his other *Cis-Sutlej* possessions by the British Government. For services rendered during the first Sikh war the *Faridkot* Chief received the title of Raja and a grant of territory. The State, with an area of 642 sq. m. and a population of 130,294 is under the political direction of the Panjab Government. The State maintains an excellent Company of Sappers and Miners for Imperial Service. The present Raja was born in 1896. The town, which lies 20 m. S. of *Ferozepore*, on the *Ferozepore-Bhatinda* branch of the North-Western Railway, contains the residence of the Raja and public offices of the State. It has a considerable trade in grain. The chief places of interest are—a fort built about 700 years ago by Raja *Mokulsi*, a Rajput, in the time of *Bawa Farid*, who gave it his name, and the *Davies Model Agricultural Farm* and farmer's house.

Hackney carriages are available, and there is a R.H. for the accommodation of travellers.

239 m. from Delhi is *Ferozepore* station (R., D.B.) (population 50,836). The fort, with an arsenal

¹ A memorial has been erected at *Ferozepore* to the Sikh garrison of *Saraghari* on the *Orakzai Samana* range (p. 337), which fell to a man defending the post in 1897.

and the Cantonment, lie 2 m. to the S. The city was founded in the time of Firoz Shah, Emperor of Delhi, 1351-87 A.D. When it lapsed to the British in 1835 it was in a declining state, but through the exertions of Sir Henry Lawrence and his successors it has increased to its present importance as a market of raw produce, much of which is due to the Sirhind Canal, extended to the District in 1882, and the Grey inundation canals along the Sutlej, inaugurated by Colonel Grey, C.S.I., in the years 1874-8. The main streets are wide and well paved, while a circular road which girdles the wall is lined by the gardens of wealthy residents.

It was at Ferozepore that the Governor-General, Lord Auckland, met Maharaja Ranjit Singh in December 1838, only six months before his death, to make arrangements for the advance of the British army on Kabul; and it was here also that, just four years later, Lord Ellenborough received the so-called victorious army on its return to British India, General Sale and the Jalalabad garrison crossing the bridge over the Sutlej at the head of the force.

On the 10th of December 1845 the Sikhs invaded the District, but, after desperate fighting, were driven back across the Sutlej. Since then peace has prevailed, except during the Mutiny of 1857. In May of that year one of the two sepoy regiments stationed at Ferozepore revolted, and, in spite of the presence of a British regiment and some British artillery, partly destroyed the Cantonment.

The *Fort*, which contains the principal arsenal in the Panjab, was rebuilt in 1858 and greatly strengthened in 1887. The railway and the trunk road to Lahore separate it and the town from the Cantonment.

The *Memorial Church*, in honour of those who fell in the Sutlej campaign of 1845-6, was de-

stroyed in the Mutiny, but was subsequently restored. In the cemetery on the Grand Trunk Road to Ludhiana lie many distinguished soldiers, amongst them Major George Broadfoot, C.B., Governor-General's Agent, N.W. Frontier, General Sale, and General Dick.

The three great battlefields of the First Sikh War, fought by Lord Gough, can best be visited from this point. Mudki (18th December 1845) lies 22 m. to the S.E.; Ferozeshah (21st and 22nd December), 16 m. E., and on the railway to Ludhiana and 8 m. from Mudki; and Sobraon (10th February 1846) 20 m. N. It was at the Harike Ford, near Sobraon, that the Sikh army entered British territories, and in this last battle they lost 10,000 men killed or drowned in attempting to escape across the river. The losses of the British in killed and wounded in these battles,¹ in which they met in the Sikhs foemen worthy of their steel, were terrible—viz., at Mudki, 872 killed and wounded; at Ferozeshah (where the troops failed in the first attack on the entrenchments, which were carried the next day), 2415; and at Sobraon, 2299. Generals Sale and M'Caskill were killed at Mudki, Major Broadfoot at Ferozeshah, and General Dick at Sobraon. The Governor-General, Sir Henry Hardinge, was present at the battles of Mudki and Ferozeshah. A plain obelisk has been erected on each of the battlefields.

Beyond Ferozepore the railway crosses the Sutlej River by a fine bridge, and proceeds past Kasur (255 m.), an old Pathan stronghold, to (272 m.) Raiwind, on the N.W. Railway. Kasur is connected on the N. with Patti, Tarn Taran, and Amritsar (p. 299),

¹ See *The Sikhs and the Sikh Wars*, by General Sir H. Gough, V.C., and A. D. Innes; also *Life and Campaigns of Hugh, 1st Viscount Gough, Field-Marshal*, by R. S. Rait.

and on the S. with Lodhran and Bahawalpur (p. 357).

Beyond Rewari the railway passes

830 m. from Bombay, Gurgaon, the headquarters of the South-Easternmost District of the Panjab. To the S., at a distance of 15 m., is the town of Sohna, a place especially remarkable for its hot spring, situated in the town and close to the hills, which form a sort of perpendicular wall, crowned with the walls and bastions of an unfinished fort. The water of this spring is strongly impregnated with sulphurous acid, which, however, evaporates very rapidly. The spring is covered with a domed building and surrounded by large cisterns and R.Hs., built from time to time by the Princes of Gwalior and Bharatpur States. The water is considered of great value for purposes of rheumatism, gout, and skin diseases.

Palwal, 37 m. from Delhi. From Muttra downwards, on the G.I.P. Railway, this is the second largest town in the Gurgaon District. Its origin seems to be lost sight of, but the Pandits seem to identify it as the Apelava of the *Mahabharata*, part of the Pandua kingdom of Indraprastha, and tradition associates with the same period the high mound of the old site of Aharwan, a village a few miles to the S.W. It is said to have lain in a state of decay for a long period, and then to have been restored by Vikramaditya some 1900 years ago. The oldest part covers a high mound formed by accumulated debris of many centuries, but of late years habitation and streets have taken up part of the plain below. During the Mughal times it was without a history, but on the downfall of the Empire it was given with

surrounding territory in *jagir* to General De Boigne, and, after the conquest by Lord Lake, to Murtaza Khan of Delhi for a few years, after which it came under direct British rule. The town is of considerable trade, especially in cotton, and has a R.H. about 3 furlongs from the railway station.

849 m. from Bombay is DELHI junction station.*

(b) Lahore to Karachi.

4 m. Lahore Cantonment, W., second station of this Cantonment.

25 m. Raiwind junction station (R.) for 33 m. Ferozepore and Rajpootana.

104 m. Montgomery station (R., D.B.) (population 8129). This place, created under British rule, is, since 1865, the headquarters of a District formerly known as Gugaira, and received its present name from Sir Robert Montgomery, Lieutenant-Governor of the Panjab (1859-65). From this point may be reached Pak Pattan, 30 m. S., near the Sutlej River, an extremely ancient place, first known in history as *Ajudhan*, and identified by General Cunningham with one of the towns belonging to the Sudrakoe or Oxudrakoe of Alexander's historians. Pak Pattan is now on the Sutlej Valley Railway between Kasur and Lodhran. It has been an important site from the earliest antiquity as a seat of a Hindu shrine, converted later into a place of Muhammadan worship by Farid-ud-din, a saint of the famous Chishti family (p. 190).¹ A great pilgrimage of Muhammadans takes place here at the time of the *Muharram*, as many as 60,000 attending.

¹ A full account of this saint is in Mr Miles Irving's paper in the *Journal of the Panjab Historical Society*, i., 70-76.

116 m. Harappa station. A hamlet now of no importance, but identified by General Cunningham with the site of a town in the territory of the Malli attacked and taken by Alexander the Great. The ruins, which are the most extensive of any along the banks of the Ravi, lie to the N. of the line and close to it.

General Cunningham attributes the destruction of Harappa to Muhammad-bin-Kasim in 715 A.D. The site has yielded thousands of Indo-Scythian coins, but not a single Greek one.

178 m. Khanewal junction. The lines serving the Chenab-Jhelum Canal Colonies, *via* Lyallpur, etc., join the main line (Lahore to Karachi) here. The main line continues on *via* Multan, but most of the through traffic to Karachi runs by the direct chord, *viz.*, Khanewal to Lodhran, which saves 26 m.

207 m. Multan city and

208 m. Multan Cantonment (R., D.B.)* station.

Multan city (D.B. in Cantonment, nearly 3 m. away from railway station) is a municipal town, with a population of 99,243, of whom the majority are Muhammadans; lat. $30^{\circ} 12'$, long. $71^{\circ} 31'$. It is still poorly furnished with metalled roads, but they are good within municipal boundaries; there has been no material change in the town recently. It is the headquarters of a Division and District of the same name, and is 4 m. from the left bank of the Chenab and not far from the old bed of the Ravi. It is a place of great antiquity, and supposed to be the capital of the Malli mentioned in Alexander's time.

The first mention of Multan by name is by Hiuen Tsang in 641 A.D.

Istakhri, who wrote in 950 A.D., describes the temple of the idol of

Multan as a strong edifice between the bazars of ivory dealers and the shops of the coppersmiths. The idol was of a human shape, with eyes of jewels and the head covered with a crown of gold. Shortly after Multan was taken by the Karmatian Chief, Jelem, son of Shiban, who killed the priests and broke the idol in pieces. It was restored in 1138. In 1666 A.D. Thevenot describes the temple of the Sun God as still standing, and the idol as clothed in red leather and having two pearls for eyes. This idol was destroyed by the orders of Aurangzeb.

Muhammad-bin-Kasim conquered Multan for the Khalifs, and it was afterwards taken by Mahmud of Ghazni in 1005, and by Timur in October 1398. Subsequently it formed part of the Mughal Empire, and then of the Durani kingdom. In 1779 Muzaffar Khan, a Sadozai Afghan, made himself ruler, but was killed with his five sons when Ranjit Singh stormed the place in 1818. In 1829 Sawan Mall was appointed governor. He was shot in 1844, and was succeeded by his son Mulraj. Upon his resignation after the First Sikh War, Mr Vans-Agnew and Lieutenant Anderson, who were sent down to receive the surrender of his office, were attacked in the fort and subsequently murdered at the Idgah on 20th April 1848, whereupon Mulraj went into rebellion. His forces were twice defeated by Major Herbert Edwardes, and he was shut up in the fort; but owing to the delay with which the British authorities took action, the Sikh forces before the place, under the command of Maharaja Sher Singh, also went into rebellion, and this led to the Second Sikh War. On the 2nd of January 1849 the city was stormed by the army under General Whish, and the fort was surrendered by Mulraj, and since then the whole District has been under English rule. At the time of the Mutiny in 1857 the garrison

consisted of two Native Infantry regiments and a Mounted Battery without a single European company. On the 10th June these troops were induced to give up their arms by the courage and adroitness of Major (afterwards Sir) Crawford Chamberlain; but on the 31st August the men rose in unreasoning mutiny, and having attacked the Bombay and Panjab troops, which had meanwhile arrived on the scene, were almost wholly exterminated. The importance of Multan as the connecting link with Sind, from which the first outside assistance against the mutineers was received in the Panjab, was at the time almost supreme.

The heat of Multan is notorious, and the rainfall, varying in the District, is at headquarters little above 7 in. The saying is—

Dust, heat, beggars, and cemeteries
Are the four specialities of Multan.

The *Cantonment*, to the W. of the town, was extended to the S.W. and made more defensible in 1888. The lines of the Indian Cavalry lie on the S. side of the Cantonment close to the railway: W. of them is the Defensible Post with the Heavy Battery lines. The rest of the garrison is located on the N. side of the Cantonment, in the order, E. to W., Indian Infantry — British Infantry — R.F.A.—Indian Infantry. In the same direction are the *Hospital* and D.B., with the Roman Catholic cemetery to the N.W., and the Muhammadan cemetery, the Parsi cemetery, and the English church in succession to the N.

The old Fort rises near the N. of the city. The entrance is by the De (Dewal=temple) Gate, so called because it leads to the famous temple of the Narsingh (Lion Man) form of Siva or Prah-ladpuri. The original temple stood in the middle of the fort, and was destroyed by Aurangzeb; while the mosque built upon its

site was totally blown up in the siege of 1848. Inside the enclosure, on the left, is the modern small temple, and, farther on, the Shrine of Rukn-ud-din, grandson of Bhawal Hakk, commonly known as Rukn-i-'Alam ("Pillar of the World"). This is an octagon of red brick, bonded with beams of Sisu wood, and supported by sloping towers at the angles. Over this is a smaller octagon, leaving a narrow passage all round for the muezzin to call the faithful to prayers. Above this is a hemispherical dome. The total height is 100 ft., but as the tomb stands on high ground it is visible for 30 m. round. One of the towers was thrown down when the powder magazine blew up in the siege of 1848, and was rebuilt in faithful imitation of the old one, including the timber bonds. The whole outside is ornamented with glazed tile patterns and string courses and battlements. The colours used are dark blue, azure, and white, which, contrasted with the deep red of the finely-polished bricks, give a most pleasing effect. The mosaics are not like those of later days, mere plain surfaces, but the patterns are raised from half an inch to two inches above the back-ground.

The tomb was built by the Emperor Tughlak Shah (1340-1350) for himself, but given by his son Muhammad Tughlak as a mausoleum for Rukn-ud-din.

Farther on, to the right, is an obelisk about 50 ft. high, erected in memory of Vans-Agnew and Anderson. On a white tablet on the W. face of the pedestal is an inscription which tells briefly an important chapter of the history of the Panjab. The concluding words are :—

The annexation of the Panjab to the Empire
Was the result of the War,
Of which their assassination
Was the commencement.

The Tomb of Baha-ud-din Zakaria ("The Ornament of the Faith"), commonly called Bahawal-Hakk, is as old as the reign of the Emperor Balban (1264-86), of which period there are few other architectural specimens. It was almost completely ruined during the siege of 1848. It was afterwards repaired and plastered over, but some glazed tiles remain outside. The lower part is a square; above this is an octagon half the height of the square, and above that a hemispherical dome. The son of Bahawal Hakk, whose name was Sadr-ud-din, is buried in the same tomb. His cenotaph is adorned with green tiles. Opposite, in the corner of the vestibule, is the tomb of Nawab Muzaffar Khan.

About $\frac{3}{4}$ m. to the N.W. of the fort is the Idgah in which Vans-Agnew and Anderson were murdered in 1848. It has been restored to the Muhammadans as a place of worship.

The Tomb of Shams-i-Tabriz, who lived in the time of Shah Jahan, stands $\frac{1}{2}$ m. to the E. of the fort on the high bank of the old bed of the Ravi. The main body of the tomb is a square surrounded by a veranda, with seven openings on each side. Above is an octagon, surmounted by a hemispherical dome, covered with glazed sky-blue tiles. The whole height is 62 ft. To the left of the entrance is a small square building, dignified as the Imambara.

219 m. Sher Shah junction station (D.B.), whence the Sind-Sagar Railway (p. 325) branches off W. and N., and crosses the Chenab, about 1 m. broad, on a splendid bridge of seventeen 200-ft. girders:

262 m. Lodhran junction (p. 354). The new railway (Sutlej Valley Railway) from Kasur joins the N.W. Railway at Lodhran, and

the chord line from Khanewal (p. 355) rejoins the main line (Lahore to Karachi) of the N.W. Railway. From Khanewal lines go to (1) Karachi, (2) Lahore, (3) Shorkot Road, and (4) Lodhran.

270 m. the Adamwahan Bridge, 4224 ft. long, carries the N.W. Railway across the Sutlej River at a height of 28 ft. above the stream.

272 m. Bahawalpur (D.B.), is the chief town with 18,414 inhabitants, and the capital of an Indian State under the political direction of the Government of the Panjab. The area of the State is about 15,000 sq. m., with a river frontage of 300 m. and a population of 780,641, of whom over four-fifths are Muhammadan. The Nawab of Bahawalpur, by race a Daudputra, ranks on the list of Panjab Chiefs next after the Maharaja of Patiala. His ancestors came from Sind, and assumed independence after the first expulsion of Shah Shuja from Kabul. In 1842 Sir Charles Napier restored to Bahawal Khan, the then Nawab, the Districts of Sabzalkot and Bhaung Bara, lost to the State in 1807.

In 1847-8 the Nawab assisted Sir Herbert Edwardes during the Multan rebellion, for which he was rewarded with a life-pension of a lakh of rupees. His son, S'aadat Khan, was expelled by his elder brother, and died a refugee in British territory in 1862. In 1863 and 1865 rebellions broke out, but were crushed by the ninth Nawab, who died soon after. The tenth Nawab, Muhammad Khan IV., was not installed till 1879, when he attained his majority. In recognition of the valuable services rendered by the State to the British Government during the first Kabul campaign, he was created G.C.S.I. in 1880. On his death in 1899 he was succeeded by his son, a minor, who was invested with full powers in 1903.

He died after a short but promising reign in 1907. The present Nawab was born in 1904, and is now being educated at the Aitchison College, Lahore. The State is now administered by a Council of Regency. The Imperial Service Corps furnished by the State include a fine camel corps, and number 550 men and 1200 camels.

The *Palace of the Nawab*, which is to the E. of the town, cost about £30,000. It is a square pile, with towers at each corner. In the centre is a hall for holding receptions. There is a fountain in front. At the side are underground rooms, where the thermometer remains at 70°, while it rises from 100° to 110° in the upper rooms. Ascending to the roof, the visitor will have an extensive view E. towards the vast *Desert of Bikaner*, which stretches, waterless, away for 100 m.

279 m. Samasata, junction for Bhatinda and thence for Ambala, Delhi, Rewari, and Bikaner.

Following the course of the Indus, through an uninteresting tract, the railway reaches

418 m. Reti station (R. and railway R.H.). A rest-camp for troops between Karachi and Lahore has been established here. 4 m. S. of Reti are the vast ruins of *Vijnot*, a leading city before the Muhammadan conquest: there is nothing to be seen but a surface raised by the debris.

488 m. Rohri station (a District Bungalow for the use of Government Officers), a municipal town (population 9919), the capital of a sub-District of the same name, which has an area of 4258 sq. m. It is on the left, or E. bank of the Indus, on a rocky eminence of limestone, interspersed with flints, and seen from a distance has a striking appearance, the houses being two and three storeys high, with flat roofs surrounded by

balustrades. It is said to have been founded by Saiyad Rukn-ud-din Shah in 1297 A.D., which was more than 300 years after the Indus deserted its former bed at Alor and came to Rohri. The rocky site of Rohri ends on the W. side in a precipice 40 ft. high, rising from the river bank. In the latter part of the rains the water rises 16 ft. above its lowest level.

The *Jami Masjid* is a fine building, now whitewashed, with three domes, and decorated with glazed porcelain tiles. A Persian inscription records that it was built by Fateh Khan, an officer of the Emperor Akbar, about the year 1572 A.D. One of the sights of the place is the *Mui Mubarak*, or "a hair of the Prophet," in amber, and preserved in a gold tube adorned with rubies. It is said that the War Mubarak (War, in Sindi = mui, Persian for hair), a building 25 ft. sq., on the N. of the town, was erected about 1545 by Mir Muhammad for the reception of this relic. It appears it was brought from Constantinople by one Abdul Baki, whose descendants have still the keeping of it. The present building, with its striking green dome and painted walls, was built a few years ago by the Pir of Kingri. The *'Idgah* was erected in 1593 A.D. by Mir Muhammad M'asum. Near Rohri are forests, covering 58,000 acres, or about 90 sq. m., which were planted in 1820 by the Talpur Amirs, and are now under the control of the Sind Forest Department. There are forests, of considerable depth, on both sides of a long stretch of the Indus.

A mouth of the *E. Nara Canal* is crossed 2 m. before reaching Rohri, and from Rohri runs due S. through Khairpur, and enters the Thar and Parkar District.

$\frac{1}{2}$ m. from Rohri, at the mouth

of the E. Nara Canal, 156 ft. wide, are the powerful sluice-gates which regulate the supply of water from the Indus. When these gates are closed during inundations it is a wonderful sight to see the fish trying to pass them. Millions collect on these occasions, and in attempting to leap the falls fall back upon common Indian cots, made of rope, which are suspended from the arches of the regulator. The fishing is let out by yearly contract, and yields a handsome revenue.

Excursion to Arore.—While at Rohri a visit may be paid to the locality, Arore (population, 840),—formerly the very ancient Alor—which is only 5 m. distant to the E. This was the capital of the Hindu Rajas of Sind, and was taken from them by the Muhammadans, under Muhammad Kasim, about 711 A.D. At that time the Indus washed the ancient city of Alor,¹ but was diverted from it by an earthquake about 962 A.D., at which time the river entered its present channel.

Once the road from Rohri passed over a bridge about 600 ft. long, across the ancient channel of the Indus, but this is now no longer the case: only a few stones show where the bridge once stood. The modern metalled road from Rohri does not pass through the village of Arore, which is on an elevation, but skirts its base, and on the farther side is a village with about 100 inhabitants, and from this an extensive ridge of ruins runs in a N.E. direction. That which bears the name of 'Alamgir's Mosque is picturesque. Two of them are shrines, one to Shakarganj Shah, where there is still an annual fair, and the other to Kutb-ud-din Shah. To the former tomb people of the neighbouring villages still make pilgrimages. It has no dome or

building over it, but is a plain, white, neat tombstone, with a border of carved flowers.

From Rohri the loop-line to Kotri (p. 365) crosses the Indus, and the direct line to Karachi (784 m. distant from Lahore by this route) runs down the left bank of the Indus to

504 m. **Khairpur** (population, 14,989), founded 1783, the seat of the last Amirs of Sind, the Talpurs, and the capital of the Indian State of that name, over 6000 sq. m.

674 m. **HYDERABAD** (Haiderabad) (D.B.), has a population of 75,952 inhabitants. It is situated on an island-hill 2 m. N. of the Ganja hills, from which it is separated by an old course of the Indus. This river now flows to the W. of the hill. On the E. is the Fuleli Canal, which used to leave the main stream 12 m. above the town, but is now supplied by a new cut which encircles Hyderabad hill on the N. From the earliest times the hill seems to have been occupied in part by a fort called "Neran," but no trace whatever of it now exists. The modern town of Hyderabad was laid out by Ghulam Shah Kalhora in 1768 as the capital of reunited Sind. The fort was built at the same time. Ghulam Shah's tomb is at the N. end of the hill.

The **Fort** of Hyderabad is of a very irregular form, and about $\frac{3}{4}$ m. in circumference; in the centre is a large "burj," or a keep, in very good preservation, which overlooks the country for miles around. On the N. side a trench separates the citadel from the town. It is crossed by a bridge leading to one of these intricate gateways which have so often yielded to a "coup de main." Where the walls do not rise immediately from the edge of the declivity the defence is streng-

¹ Alor, Uch, and Hyderabad are believed to have been the sites of three of many Alexandrias founded in the Panjab.

thened by a ditch, 10 ft. wide and 8 ft. deep. The residences of the principal Amirs, formerly within the walls of the fort, have now almost disappeared. In fact, since the explosion in the fort in 1906, very little remains but the tower, almost all the buildings, including the arsenal, being totally destroyed. Portions of Mir Nasir Khan's palace alone are kept up, in proximity to the Record Office. This palace used formerly to be occupied by the Commissioner in Sind on his tours and by other officers of rank when visiting Hyderabad. Sir C. Napier frequently resided in this palace, and in it he held his Grand Darbar on 24th and 25th May 1844, when every Chief in Sind came from far and near to submit himself to the conqueror. One room in Mir Nasir Khan's palace, styled the Painted Chamber, is still tolerably perfect, and gives some idea of what the effect must have been when all was uninjured. In the recesses various historical subjects connected with the Kalhora family are delineated. In one recess is a picture representing an interview between, according to Burton, Maharaja Ranjit Singh and Lord Lake, who is depicted in the uniform of a political officer. In this interview Ranjit Singh was informed that his proposed aggressiveness in Sind would not be tolerated by the Government of India, but the protection offered to the Mirs, though commemorated by them thus, was not remembered later during the first Afghan war, a forgetfulness which was the cause of their downfall. The visit to the fort should conclude with a walk round the ramparts and an ascent to the top of the circular tower, whence a fine view of the surrounding country, with the Fuleli on one side, winding through the dusty plain, and, on the other side, of the rapid Indus, with its buttress of rock in the background, will be obtained.

Undoubtedly the finest building

in Hyderabad is the Kacheri, built in a modified classical style in 1912, at a cost of about Rs. 2½ lakhs. It consists of Revenue and Judicial offices. Just S. of it, and overlooking the railway, is the tomb of Shah Makkai, a saint whose very name is forgotten. The tomb is interesting only for the battlemented mud wall which was built on this Southern spur as a counterpoise to the similarly treated tomb of Ghulam Shah Kalhora. The main bazar running for over a mile in a straight line from the fort gate to the new market is worth a visit.

The tombs of the Kalhoras and Talpurs cover the N. portion of the hill on which Hyderabad is built. The tombs of the Talpurs are very beautiful, but are not in such exquisite taste as that of Ghulam Shah Kalhora, the description of which may serve for all. On entering the enclosure by a small but richly-carved door the visitor is impressed by the beautiful symmetry of the mausoleum and the religious feeling displayed in the decorations. Formerly latticed windows in a lofty dome sparingly admitted the light, and shed a subdued lustre over an exquisitely-carved marble tomb, at the same time revealing the rich fresco paintings on the walls, without giving them too much prominence; but the dome fell in a few years ago and has been replaced by a flat roof. The beautiful marble railing surrounding the tomb was shattered by the fall, and there are only the fragments of it now. Over one of the archways is an inscription in Persian, written by the order of his son Sarfaraz, whose tomb is in a burial ground below the hill, and was built in 1785 A.D. It is painted inside, and is in good repair. There are four other tombs of the Talpur family—that of Mir Karam Ali, a domed rectangular building, with a turret at each corner, built in 1812, with marble fretwork, and roofed with coloured tiles; that

of Mirs Mured Ali, Nur Muham-mad, Nasir Khan, and Shahdad Khan, built in 1847, with white marble tombs inside; that of Mir Ghulam Shah and Fazl Ali, erected in 1855; and that of Mir Muham-mad, built in 1857. All the Tal-pur tombs, except Karam Ali's, are kept in good order at the cost of surviving members of the family.

The **Cantonment** lies to the N.W. of the town. There is a fine range of barracks for Europeans. Not far off is the church of St Thomas, built in 1860, at a cost of Rs.54,000. It can hold 600 persons. It has several memorial windows, and on the N. side of the communion-table is a brass showing the number of officers and men who fell at Miani and Dabo (1843).

The Roman Catholics have had a church at Hyderabad from the time of the conquest.

Hyderabad is famous for its embroideries (this refers presumably to the embroidery of "Naths," the leather covers for the saddles of riding camels) in silk and gold and its silver tissues. There are four or five famous fabricants, each working with a different stitch. The patterns are of endless variety. All the work is made on a simple wood frame.

In the Amirs' time there was a great demand for enamelling, the principal sardars vying with each other in the beauty and costliness of their swords, matchlocks, and horse-trappings, which were profusely decorated with enamelled ornaments. In enamelling on gold the colours red and crimson are chiefly used, and blue and green are the favourite colours with silver.

A visit can be made to the famous battlefields of Miani and Dabo, on which, in 1843, was decided the fate of Sind. The three places form a triangle, Miani being 6 m. to the N.W. of Hyderabad and Dabo 5½ m. to the E. of Hyderabad.

On the E. side of the monument at Miani, enclosed in a well-kept garden, are the names of the officers who fell.

From Hyderabad a branch line runs by (55 m.) Shadipalli to 310 m.) Luni junction (p. 184). At Mirpur Khas, 42 m. E. of Hyderabad, a stupa, 50 ft. each way, with terra-cotta figures of Buddha, has been lately excavated. A branch line also runs S. to Badin (about 62 m.) along the Fuleli. Five m. N. of Tando Mahomed Khan (20 m.), alongside the line, is another Buddhist stupa, known as Sudharan Jo Dhadho, near which are some 15th century Baluch tombs and some prehistoric tumuli.

A memorial pillar has been erected near the river just S. of One Tree Bundar to commemorate the site of the Residency so ably defended by Major Outram.

The main line now crosses the Indus to

679 m. Kotri (D.B.) (loop-line to Rohri, p. 358), a place of some importance (population 7256), and for a time the terminus of the Sind Railway and the Indus Flotilla. The railway at this point quits the Indus for Karachi, lying some 50 m. N.N.W. of its mouths.

731 m. Jungshahi station (R.)

From Jungshahi a good road runs 13 m. to Tatta (population, 11,161). Two-horse carriages are available, which can perform the journey in a couple of hours. At mile 11 on the Makli Hill there is a D.B. (no provisions procurable).

Tatta, as late as 1739, a great city of 60,000 inhabitants, first comes into notice as the seat of the Samma rulers of Lower Sind, who made it their capital about 1340 A.D., and who reached the zenith of their power in the reign of Nizam-u-din (1461-1509 A.D.), the Jam Nindo still remembered by the

people as the prince-hero of the Golden Age of Sind. After his death the Samma rulers gave place to Arghuns and Turkhan, invaders from the N. In 1555 a Portuguese fleet of 28 ships, under Pedro Baretto Rolim, arrived at Tatta, and, in the absence of the ruler in Upper Sind, sacked and burned the city and carried off such booty as had rarely been taken in Asia. The last Turkhan died in 1612, and Lower Sind became a province of the Mughal Empire, which it remained till 1739, when the Empire collapsed beneath the onslaught of Nadir Shah. In the chaos which ensued new Sindi dynasties arose with capitals further N. at Khudabad and Hyderabad, and Tatta declined to a mere country town.

The most remarkable sight in Tatta is the great mosque, begun by Shah Jahan in 1647 A.D. and finished by Aurangzeb. It has been a splendid edifice, though now much decayed. The glory of ancient Tatta is not, however, to be sought in the town, but on the Makli Hill, a couple of miles W. on the Jungshahi road. This vast necropolis, covering an area of 6 sq. miles, is said to contain 1,000,000 graves, and probably contains far more. Among the innumerable tombs rise the remains of many a stately mausoleum, a few of which still survive in something of their former splendour.

Immediately N. of the steep incline which carries the road down the Eastern scarp of the hill, is the tomb of Mirza Jani Beg, the last of the Turkhan rulers. It was built in 1599 A.D., and is of brick, the faces of which are glazed blue and blue-green.

Further N. rises the splendid mausoleum of Nawab Isa Khan, Governor of Sind, erected between 1628 and 1644 A.D. It is by far the largest and best preserved monument on the hill, and is built entirely of stone in the Fatehpur-

Sikri style, richly decorated throughout with surface tracery. It stands on a raised platform in the middle of a court, and is surrounded by a veranda on carved pillars, with an upper storey. Stairs on the E. lead up to the roof.

A little distance to the E., on the very edge of the hill, is a low building of stone in the same style, containing the tombs of the ladies of the zenana of Nawab Isa Khan. The walls inside are covered with carving in low relief, the wonderful variety of the patterns being only equalled by their exquisite design and perfect finish. The view from the Eastern door-way across the intervening lake to where the present town of Tatta rises on the ruins of dead cities of the past, is one of the most beautiful in Sind.

Near the N.W. corner of Nawab Isa Khan's tomb is that of Diwan Shurfa Khan, in whose lifetime it was built (1638 A.D.). It is a massive square structure with heavy round towers at the corners, and is constructed of fine brickwork, pointed in the joints with strips of dark blue tiling. The dome has been covered with blue glazed tiles, a portion only of which remains.

The visitor who can spare the time should not fail to proceed 1½ m. further N. along the crest of the hill to the tomb of the famous Nizam-u-din (Jam Nindo). This is a square stone structure without a dome, which some have thought was built from the remains of a Hindu temple. The W. facade is magnificently carved in a purely Hindu style. Inside, the springing of the great arches to support the dome, which was never built, affords an excellent example of the early attempts of Hindu craftsmen to arrive at the Muhammadan arch by their own method of horizontally-laid stones. The noble Muhammadan simplicity of the interior is in striking contrast with

the Hindu richness of the W. facade.

750 m. Dabheji station is the place from which Bhambhor may be visited; it is 6 m. distant.

Bhambhor, now a shapeless mass of ruins, and very difficult of access, of which there is no authentic history, is supposed by the natives to be the site of the most ancient seaport in Sind. It may have been the ancient Debal, the first city captured by Muhammad Kasim, having its name from a temple in the fort of great celebrity. It is unquestionably of great antiquity, and the remains of ramparts, bastions, towers, etc., prove its former importance. Many coins also have at different times been found amongst its ruins. The town of Gharo is about 3 m. to the E.

782 m. **KARACHI** (*Kurrachee*) Cantonment (or Frere Street) station *. The M'Leod (or City) station is 2 m. farther on towards the harbour.

Karachi (lat. $24^{\circ} 51'$, long. $67^{\circ} 4' E.$; population 151,903; distance from London 6283 m.) is the chief town in Sind. It is situated at the N.W. extremity of the delta of the Indus, and is the headquarters of the Commissioner, the Judicial Commissioner, and the General commanding the District. It existed as a mere fort from 1725 to 1842, when it was yielded up by the Talpūr Amirs to the British. Then it began to rise rapidly as a flourishing seaport with a trade whose exports have now an annual value of £15,000,000 (subject to great variations, however) and imports of £7,000,000. The steamers using the port number about 1050, with a tonnage of 1,500,000 tons; the income of the Port Trust is £170,000, and of the Municipality 18 lakhs. N. of the station are the **Napier Barracks** and Station Hospital, a fine block of buildings

extending over the maidan for 1 m., with accommodation for 1500 European troops. E. of the Lines is the **E.C. Church**. W. of Frere Road from the railway station is the **Frere Hall**, built in 1865 in honour of Sir Bartle Frere. The building contains a large ball-room and public meeting-room (which is fitted with a stage and false floor and fixed seats in tiers for theatrical purposes), and the Karachi General Library. In the grounds are two fine statues, one of the Queen-Empress Victoria, unveiled by King George V., then Prince of Wales, on 18th March 1906, and the other of King Edward VII., unveiled by Lord Willingdon, Governor of Bombay, on 7th January 1916. Adjoining the Frere Hall compound are the handsome buildings of the Sind Club, the Collector's Bungalow, Ladies' Gymkhana, etc.

Close by, W., is **Government House**, built by Sir C. Napier, bought from him by Government, and now the residence of the Commissioner in Sind. Behind it is **Trinity Church** (the garrison church), with its square campanile originally 150 ft. high, but reduced in 1904 to 119 ft. by the removal of the top. It was built at the instigation of Sir Bartle Frere, and contains a fine stained-glass window, put up in honour of Sir C. Napier and the victors of Miani. Beyond, W., are the **Masonic Hall** and **Y.M.C.A.**, the **Artillery Lines**, **Barracks** (used as a War Hospital), and **Arsenal**; and a few yards farther are **St Andrew's Church** (Scotch Kirk), and the Headquarters Karachi Artillery Volunteers, and near by, E., is the **Empress Market**.

On the N.W. side of the Cantonment is the **Zoological Collection** in the Gardens—well worth a visit.

From **Government House**, M'Leod Road leads to a fine block of buildings containing the quarters of the **European** and **Persian Gulf Telegraph Staff**, the

General Post Office, the **D. J. Sind College**, the **Victoria Museum**, the **Burns Garden**, and the **Municipal Offices**. On the left of the road is the **Karachi City Railway Station**. Beyond are the **Court House**, containing the **Judicial Commissioner**, **District Judges**, and **Town Magistrate's offices**, the **Chamber of Commerce** and the offices and godowns of the **European merchants**, **Banks**, and **Steamship Agencies**; and N.W. of these lies the native city. The native city lies to the N. of **M'Leod Road**, between it and the **Layari River**, and is traversed by **Bandar Road**, which joins the former near the memorial clock-tower of **Sir Wm. Merewether**. The **Bandar Road** leads from the **Native Infantry Barracks**, in the E., to the **Napier Mole** running to the **Karachi Harbour**. Along or near it are the following buildings: the **Native Infantry Mess**, the **Headquarters Sind Volunteer Rifles**, **Tramway Office** and **Stables**, **Y.M.C.A.**, **Small Causes Court**, **Richmond Crawford Veterinary Dispensary**, **Civil Hospital** and **Epidemic Diseases Hospital**, **C.M.S. Mission** and **Church**, **G. H. Khalikdina Hall**, **Max Denso Hall**, the new **Port Trust Offices** (used as a **War Hospital**) and various business premises. New **Municipal offices** are in course of construction, but the work has been suspended for the War.

2 m. along the **Napier Mole** is **Kiamari** (4 m. from the **Cantonment**; carriage fare, Rs.4), a busy shipping port, with its long line of wharves, and connected with the **Cantonment** and native town by rail, tram, road, telegraph, or telephone. In the old days this was an island. At **Kiamari** the **Karachi Harbour** commences. It is a first-class harbour, capable of accommodating the largest steamers, and owes its existence to the strenuous exertions of **Sir Bartle Frere**. It was designed by

Mr Walker, commenced in 1854 and completed in 1883, since when additional railway facilities have constantly been added. There is very good sea-fishing to be had in the harbour, which is famed for its fish and oysters. Near the **Napier Mole**, on the back-water, is the **Sind Boat Club-house**. The **Defences** of the **Harbour** consist, besides the marine defences, of three large forts, the largest on the **Manora** headland, at the entrance to the harbour on the W. The **Lighthouse** near this shows a fixed light 148 ft. above sea-level, visible 17 m. in clear weather. On the meridian of **Karachi** there is no land between **Manora** and the **South Pole**.

The cheapest route from **London** to **Quetta**, **Multan**, **Lahore**, and **North-West India** is *via* **Karachi**. Through tickets by the **P. & O.** and other steamer lines to **Karachi**, 483 m. (**P. & O.** passengers change to **B.I.S.N.** mail steamer in **Bombay** harbour), are issued at the same price as tickets to **Bombay**. There is a quick weekly service by the **B.I.S.N.** from **Karachi** to **Muscat**, **Bandar Abbas**, **Bushire**, and **Basra** on the **Persian Gulf**.

Clifton, 3 m. S. of the **Cantonment**, a favourite afternoon ride and drive, stands on the sea, and is approached by a good road. There is a fine sandy beach here extending S.E. for miles; on this beach turtles in **August**, **September**, and **October** come up at night to lay their eggs. During the cold weather the tanks and jeels about **Karachi** swarm with small-game birds, while in the **Baluch Mountains**, 25 m. W. of **Manora**, ibex, urial, panther, and bear are occasionally to be found. In the **Hab River**, * the boundary between **India** and **Baluchistan** (20 m. from **Karachi**), good mahsir fishing can be had.

Magar Pir, 11 m. N. of **Karachi**, is well worth a visit. For a

detailed account of this curious place see *Dry Leaves from Young Egypt*,¹ p. 218, and Burton's *Sind*, I, 48. As the place can be comfortably seen in an afternoon from Karachi, there is no necessity to stop there. The *dharmsala*, or R.H., is unsuitable for Europeans; a good motor-road now runs to within a mile. A Leper Asylum has been established here.

From the roots of a clump of date-trees gushes out a stream of hot water, the temperature of which is 133°. On the W. side of the valley is a temple surrounded by a thick grove and close to a swamp caused by the superfluous waters of the spring. There is also a tank surrounded by a 5-ft. mud wall, and containing some eighty or ninety crocodiles, which, as they attract a considerable number of visitors, the Muhammadans in charge of the Pirs Tomb regard as sacred, for a brisk and remunerative business is done by these custodians in killing goats for visitors to see the crocodiles fed. The crocodiles are of the snub-nosed species, different from the long-snouted *gharial* of the Indus.

488 m. Rohri (p. 358) to Kotri by the right bank of the Indus, 226 m.

Opposite to Rohri, in the Indus, is the *Island of Khwaja Khizr*. Here is a mosque of great apparent antiquity. It has an inscription, the date 951 A.D. The shrine of Khizr, who was also called Zinda Pir, or "the living saint," is venerated by Hindus and Muhammadans alike.

A little to the S. of the Isle of Khizr is the larger *Island of Bukkur*. It is a limestone rock of oval shape, 800 yds. long, 300 yds. wide, and about 25 ft. high. Almost the whole of it is occupied by a fortress, which has two gate-

ways, one facing Rohri on the E., the other Sukkur on the W. The Amirs attached much importance to this fort. But on our advance to Kabul in 1838, it was placed at the disposal of the British Government, and was used first as an arsenal, and then, until 1876, as a prison for Baluchi robbers. As early as 1025 A.D. we hear of Abdur Razzak, Minister of Mahmud of Ghazni, expelling an Arab Governor from Bukkur. In the beginning of the 13th century it was an important fortress of Nasir-ud-din Kabachas.

In 1327 A.D., Bukkur seems to have been a place of note, for the Emperor Muhammad Tughlak sent persons of importance to command there. Under the Samma Princes the fort changed hands several times, being sometimes under their rule and sometimes under that of Delhi. During the reign of Shah Beg Argun the fortifications were rebuilt, the fort of Alor being destroyed to supply the requisite material. In 1574 it was delivered up to Keshu Khan, an official of the Emperor Akbar. In 1736 it fell into the hands of the Kalhoras, and subsequently into those of the Afghans, who retained it till it was taken by Mir Rustam of Khairpur.

The Indus, which runs here with great rapidity, is crossed by the grand *Lansdowne Bridge*, erected on the *cantilever principle*, connecting Rohri with the Island of Bukkur; the line then crosses the island, and is connected with Sukkur (see p. 366) by another bridge of a single span. The span is 840 ft. from centre to centre of the cantilevers; each cantilever is 320 ft. long, and the central girder connecting them is 200 ft. long. The roadway is 18 ft. wide in the clear, or enough for a line of carts in each direction. A single line of railway is laid in the centre. A path 4½ ft. wide for foot and pony traffic is also provided on each side outside the

¹ In the Library in the Frere Hall.

railway, and can be used at all times. The total weight of steel and iron employed was nearly 3000 tons.

3 m. **Sukkur** station (R., D.B.) and railway R.H. near the station,* the headquarters of the Sukkur District, standing on the right bank of the Indus, has a population of 39,161, and is well drained and clean. There are also some locomotive shops of the North-Western Railway here. A series of low, bare limestone ridges slope down to the Indus, and on them, about 1 m. off, is the European quarter. This quarter, together with a large Indian town, is called **New Sukkur**, to distinguish it from the old town of the same name. The only sights are the tombs of Shah Khair-ud-din, built about 1758, and *Muhammad M'asum*, in the Cantonment, at the foot of a tower 90 ft. high, which he erected, and which overlooks the country for many miles. The town was ceded to the Khairpur Amirs between 1809 and 1824. In 1833 Shah Shuja'a defeated the Talpurs here with great loss.

15 m. **Ruk junction station** (R.). From here the Sind, Pishin, and Quetta Railway branches N. (see Route 19).

49 m. **Larkana station** (D.B.) is a municipal town (population 16,097), the capital of a district of the same name. The country surrounding it is fertile and populous, and perhaps the finest tract in the whole of Sind.

The fort served in the time of the Talpurs as an arsenal, but has now disappeared.

139 m. **Sehwan station** (D.B. in the old fort).* The chief town (population 4749; 117 ft. above sea) of a sub-district of the same name in the Larkana District. The river Aral, which is

crossed by a bridge with iron girders, flows close to the town. The tomb of *Lal Shahbaz* is enclosed in a quadrangular building, which has a dome and lantern, and is adorned with beautiful encaustic tiles with Arabic inscriptions. Mirza Jani, of the Tarkan dynasty, built a still larger tomb to this saint, which was completed in 1639 A.D. by Nawab Dindar Khan. The gate and balustrade are of wood, encased in hammered silver, the gift of Mir Karam 'Ali Talpur, who also crowned the domes with silver spires. The shrine of Lal Shahbaz is one of the most venerated in Sind, and on the 18th *Shaaban* in each year is the resort of some 30,000 to 40,000 pilgrims from Sind and the Panjab. Hindus and Muhammadans join impartially in paying reverence to Lal Shahbaz. According to the Hindus, the original shrine was that of an ancient Raja. The chief object, however, of antiquarian interest in Sehwan is the **Fort**, which dates from a period prior to Alexander the Great. It is an artificial mound in the N.W. part of the town, said once to have been 250 ft. high, but now only 60 ft., measuring round the summit 1500 ft. by 800 ft., and surrounded by a broken wall. The remains of several towers are visible, but the fortifications are ruined: the fort was, according to a tradition, destroyed by an earthquake.

Sehwan is at the tail of the Government system of *canals*, of which the principal are the *W. Nara*, 30 m. long and over 100 ft. wide at its mouth; the *Ghar*, 22 m. long and 80 ft. wide; the *Naurang*, a continuation of the *Ghar*, 21 m. long and 90 ft. wide; the *Biver-ji-Kur*, 27 m. long and 48 ft. wide; and the *Eden Wah*, 23 m. long.

There is good shooting to be had in the Sehwan District—hyenas, wild hog, wolves, foxes, jackals, the hog-deer, and the *chinkara*, or "ravine antelope," being common.

The Manchhar Lake * is not very far from Sehwan to the W.: Bubak Road is the nearest railway station. It is a large natural depression, supplied with water by hill torrents and by Indus water, which reaches it during the inundation season by way of the W. Nara Canal and the Aral River. It covers an area of 160 sq. m. in the wet season, but shrinks to about half that size at other times. In the cold weather there is abundance of water-fowl shooting, and excellent snipe, quail, and partridge shooting round the edge of the lake, and an extraordinary number of fine fish.

The fish are generally caught with spears or nets. The boat, which is flat-bottomed, is propelled by one man, while another, armed with three or four light cane spears, 8 ft. long and barbed at the tip, stands at the prow watching the water; as soon as he sees a fish flash through the weeds, with which the lake is covered, he hurls a handful of spears in that direction, and is sure to strike one or two fish, which, as the spear becomes entangled in the weeds, cannot go far, and are followed and lifted into the boat.

For the other method of catching the fish an ingenious circular enclosure of nets, supported by poles, is laid down in the lake. A flotilla of small boats containing men with drums and other noisy instruments surrounds the enclosure at some distance and gradually draws nearer. The fish, frightened by the din, and not daring to escape through the boats, press heavier and nearer to the net. Then when the boats approach, huge *dambhros* are seen flinging themselves into the air to a height of from 3 ft. to 4 ft., hoping to jump over the lower net, but only to strike against the upper one and fall into the bag below, a self-made prey. In the meantime men with spears hurl them at the huge *gandams*, which are

unable to leap, and, lifting them high in the air over the net, deposit them in the boats. Divers then go inside the net and examine it carefully under water, securing such fish as may be endeavouring to force a passage through it. These men in their habits seem almost amphibious.

150 m. from Sukkur is Laki station (R.), good quail, duck, and snipe shooting in the neighbourhood. The railway runs through the Laki Pass, at an elevation of 200 ft., the Indus lying below. This range of hills contains several hot springs, and shows many signs of volcanic action. There are also lead, antimony, and copper in them, though not in great quantities.

226 m. from Sukkur is Kotri station (R.) (p. 361).

ROUTE 19.

RUK JUNCTION to CHAMAN, on the frontier of Afghanistan, by Shikarpur, Jacobabad, Sibi Junction, and Quetta, returning by the Harnai route.

Ruk junction station (R., D.B.), 15 m. on the Karachi side of Sukkur (see p. 366). The first station of importance on the Sind-Pishin Railway is

11 m. Shikarpur station (D.B. and railway R.H.)*, a municipal town, founded 1617. The popula-

tion is 54,641, of whom 19,078 are Muhammadans. The great road to Baluchistan, Kandahar, and Central Asia passes through it, and Shikarpur was long a great trade depot. These conditions have, however, been changed by the opening of the railway and consequent facilities for direct trade.

The bazar is covered in on account of the heat in summer, Shikarpur, Jacobabad, and Sibi being about the hottest places in India. The old bazar has been lengthened, and the prolongation of it, called the *Stewart Ganj Market*, after a popular District officer, is well built and commodious, and is the best bazar in Sind. To the E. of the town are three large tanks, called Sarwar Khan's tank, Gillespie, and Hazari tanks. There is abundance of water for irrigation and other purposes, but the climate is very hot and dry, and the rainfall for the last ten years averaged only 2.7 in.

37 m. Jacobabad station (D.B.) (population 11,361). This was the chief military frontier station before Quetta was occupied. The Cantonment was abandoned in 1914, and troops are no longer stationed here.

The town was planned and laid out on the site of the village of Khangarh by General John Jacob, the distinguished frontier officer and commander of the Sind Horse, who built the Residency, and is buried here under a massive tomb. When he arrived in Upper Sind the whole country about Khangarh was in a state of anarchy; bodies of mounted robbers—Bugtis, Dombkis, Burdis, or Marris—swept the plains and robbed and murdered those they encountered. Khangarh itself offered a stout resistance to the 5th Bombay N.I., but General Jacob's rule put an end to all these troubles, and to him the peace of Upper Sind was originally due. Of late years Jacobabad has decreased in im-

portance as a frontier outpost; it flourishes, however, as a market town and as the headquarters of a civil district. The temperatures at Jacobabad are in excess of any recorded in India, a reading of 126° Fahrenheit in the shade in the months of May and June being not uncommon.

122 m. Mithri station.

134 m. Sibi junction station (R., D.B.). This place is in the valley of the river Nari, near the entrance of the Bolan Pass. Sibi was occupied by the British in the name of Shah Shuja from November 1841 to September 1842, the old fort being used as a commissariat depot. The place was ceded to the British by the Treaty of Gandamak in 1879. The Victoria Memorial Hall for *jirgas* is a fine building.

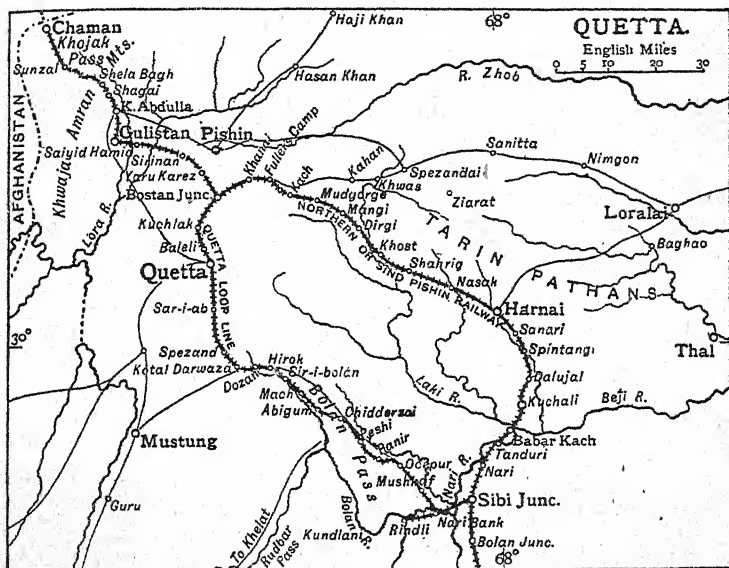
From Sibi to Bostan junction there are two lines—the Northern, or *Harnai*, loop-line which has maximum gradients of 1 in 25, and traverses a country inhabited mostly by Pathans; and the Southern or direct, Mushkaf-Bolan line. A word of warning is necessary to a visitor starting on these journeys. In the winter cold of from 22° to 23° of frost is not at all uncommon on the higher parts of the line, whilst in summer 128° inside the house is not an unfrequent temperature at Nari. It is scarcely necessary to say that the consequences of insufficient clothing may be very serious to travellers who make this trip as part of a cold-weather tour.

1. The Mushkaf-Bolan Direct Route.

The original alignment of this railway along the Bolan was afterwards abandoned in favour of the present line. As far as Rindli, at the mouth of the Bolan Pass, the old line is still kept up, but no trains are run upon it.

From Mushkaf (145 m.) the line runs for 28 m. up the Mushkaf Valley with easy gradients. It then passes by the Panir Tunnel, 3000 ft. long, into the upper Bolan, and ascends by very steep gradients, some as much as 1 in 25, to Kolpur (196 m.). For 6 m. beyond the tunnel the works are exceptionally heavy, but from there

Division. The garrison consists of British and Indian troops. It is situated at the N. end of the Shal Valley in lat. $30^{\circ} 10'$, long. $67^{\circ} 1'$, 5500 ft. above the sea-level and $100\frac{1}{2}$ m. N. of Kalat. The Civil Station, with the Residency, the Club, the fine Sandeman Hall, a design of the late Colonel Sir S. Jacob, with a statue of Sir Hugh Barnes,



up to Mach (181 m., 3250 ft.—engine changing station) they are lighter. From Hirak (189 m.) they become very heavy again, and the Bolan is crossed nine times.

222 m. Quetta¹ (Kotah) station * (R., D.B.). At Quetta are the headquarters of the Honourable, the Agent to the Governor-General, Baluchistan, and of the 4th Army

¹ From Spezand, 16 m. below Quetta, a railway has been constructed over 83 m. of desert to Nushki.

the Sandeman Library, M'Mahon Museum, and the King Edward's Memorial, lie E. of the railway, and beyond these is the city. N. of both, on the farther side of the Habib Nulla, are the Cantonments. To the N.W. stands the *miri*, or fort, a former residence of the officials of His Highness the Khan of Kalat, from which there is a very extensive view of the neighbouring valley. The Staff College is situated on the extreme N.E., on the road to the Hanna Valley. The place is surrounded by fortified

lines, and commanding, as it does, with its strongly-fortified outpost of *Baleli*, both the *Khojak* and *Bolan* Passes, it forms one of the most important Indian frontier posts. It has rapidly increased since 1880, and now contains 33,922 inhabitants (Cantonments, 16,901, city, 17,021), the numbers going up in the summer to close on 50,000. In winter the cold is very severe. Numerous gardens and orchards abound in the suburbs, and the water supply is good.

Quetta was occupied by British troops in the first expedition in 1838-42 to Kabul. In 1877 a British Political officer was again posted at Quetta (which was taken in lease in 1883), since when there has been a Governor-General's Agent for Baluchistan, Sir R. Sandeman, K.C.S.I., being the first to bear the title. The present Agent is the Hon. Colonel Sir John Ramsay, K.C.I.E., C.S.I. During the Afghan campaigns of 1878-80 Quetta formed the base of operations for the Bombay column.

The line now proceeds up the Quetta Valley by *Baleli* and *Kuchlak* to

242 m. Bostan junction for Harnai Route (see below).

About 20 m. beyond Bostan junction the Lora River is passed, the first stream the traveller will have seen on the Central Asian watershed, all the rivers he has hitherto crossed draining into the Arabian Sea.

249 m. Yaru Karez, the station for Pishin, 6 m. distant; tonga service. Since the opening of the railway to Chaman the importance of Pishin, which is the principal place of the Achakzai-Kakar-Tarin country, has much decreased.

273 m. Gulistan station. In the infancy of these lines it was in-

tended to lay a short surface railway from here towards the Ghwazha Pass, an alternative route to Kandahar. It was, however, subsequently abandoned. The main line turns due N. to

281 m. Kila Abdullah (R.).

288 m. (from Ruk), Shelabagh is at the foot of the *Khojak Pass*, and near the S.E. end of the tunnel passing under the Khwaja Amran Mountains. This tunnel is about 2½ m. long. Passing through it, we reach Sanzalla (R.) and then the present ending of the line at

310 m. Chaman station, where there is a small military outpost.

The *Khojak Pass* is surmounted by a fine military road, and those who have the opportunity should ascend it (7500 ft.) to see the magnificent view W. over the Kadanai Plain and N. to beyond Kandahar, which is hidden by intervening hills.

If the line is continued to Kandahar, it will necessarily make a long bend to the N. to obtain length for the descent into the Kadanai Valley, which lies far below Chaman, and the distance to Kandahar, the Gandhāra of ancient India and the Arachosia of Alexander, will be about 65 m.

2. Bostan to Sibi, Harnai Route.

The scenery of this route, which is unsurpassed for weird grandeur in the whole world, is best seen by taking the downward route from Bostan, and should at any sacrifice of time be seen by daylight. Leaving Bostan, the line, skirting the northern slopes of the Takatu Mountain on a gradually rising gradient, in one place forming a complete circle and passing over itself, runs to

Kach * 110 m. from Sibi, 6357 ft. From here a good tonga road

goes (32 m.) to Ziarat (D.B.), the headquarters of the Local Government and of the District, a valley 8000 ft. above the sea, set amongst hills clothed in juniper forests. This place is entirely shut up in the winter, as it is subject to heavy snowfalls.

From Kach the line drops all the way to Sibi.

Mangi, 97 m. From here a good riding road goes to Ziarat (21 m.), traversing the narrow, deep defile of Mir Kásim Tangi.

Immediately after Mangi the Chappar Rift is traversed. This is the shoulder of a mountain which has the appearance of being cracked from top to bottom through the solid mass of limestone. The Rift itself is passed at nearly 300 ft. above the bed of the stream, and the train at several places seems suspended in the air. The line near the Rift constantly runs through tunnels and across high bridges. On leaving it a magnificent view is obtained of the Khalifat Range (11,440 ft.), rising sheer out of the valley on the N.W.

Harnai (R.), 58 m. from Sibi. From here the tonga road to Loralai and Fort Sandeman takes off.

Nari (7 m.). The line leaves the hills and runs over a flat alluvial plain to Sibi (p. 368).

Quetta-Nushki Extension.

The Quetta-Nushki branch of the North-Western Railway takes off at Spezand, 16 m. from Quetta. It enters the Chagai District at Galangur, 53 m. from Spezand, and runs in a Westerly direction to Nushki, headquarters of the District, which is 82 m. from Spezand, 98 m. from Quetta, and 606 m. from Karachi.

Nushki was leased from His Highness the Khan of Kalat in 1889 on an annual quit-rent of Rs.9000.

Trade converges at Nushki from Kharan, and Shorawak, and at Dalbandin from (a) Jalk and Mashkel, (b) Garmsel and the Eastern Helmand, and (c) Seistan and other parts of Persia.

The North-Western Railway allows a rebate of two-thirds of the freight on all goods traffic to or from Persia, and the East Indian and the Oudh and Rohilkhand Railways of one-third.

The temperature at Nushki varies from 52.5 in winter and 97.3 in summer.

The population of the Nushki Tahsil is 8118 (census 1911).

ROUTE 20.

(a) SAHARANPUR by the Oudh and Rohilkhand Railway to Mughalsarai, through Lhaksar Junction, Moradabad, Bareilly Junction, Lucknow, and thence to Benares by (1) Fyzabad and Jaunpur, and (2) Rae Bareilly.

(b) Lhaksar Junction to Hardwar, Dehra Dun, and the Mussoorie, Landour, and Chakrata hill stations.

(c) Bareilly Junction to Naini Tal, Almora, and Ranikhet.

Journey in 8½ hrs., 18 hrs., and 13 hrs., respectively.

Fares—about 18 Rs., 35 Rs., and 28 Rs., first class, respectively.

(All these are accessible by motor from Bareilly, the distances

being about 85 m., 132 m., and 103 m. in each case. A few motors for hire also run from Kathgodam (1), to Naini Tal Brewery (2) to Ranikhet, for which arrangements can be made with the R. and K. Railway).

(a)

Saharanpur junction (see p. 295).

22 m. from Saharanpur is **Roorkee station** (*Rurki*) (D.B.). It is 43 m. by road to Dehra Dun, 65 m. to Meerut, 32 m. to Muzaffarnagar, 19 m. to Hardwar. Petrol can be procured at the C.E. College workshops, where repairs can also be effected. Roorkee is a modern manufacturing town and military station, and stands on a ridge overlooking the bed of the Solani River. Up to 1845 it was merely a mud-built village; it is now a flourishing town of 16,584 inhabitants, with broad, metalled roadways meeting at right angles, and lined with excellent shops. It is the headquarters of the Ganges Canal workshops and iron foundry, established in 1845-1852. The canal passes to the E. of the town between raised embankments. Besides the Solani aqueduct, the Dhanauri crossing, Pathri and Ranipur super-passages are, between Roorkee and Hardwar, objects of engineering interest.

The Thomason Civil Engineering College was founded in 1847. The students are partly English youths born in the country, partly Anglo-Indians and Indians. A textile class, with textile machinery, has been started: the laboratories have been largely increased. The library has 25,000 volumes available under certain restrictions to the public. The whole number of students is about 350.

33 m. **Lhaksar junction station**. A branch line from here runs N. 16 m.) to Hardwar and Dehra Dun,

giving access to the hill stations of Mussoorie, Landour, and Chakrata (see (b) p. 380).

59 m. from Saharanpur is **Najibabad**. Branch line to *Kotawara* (15 m.), whence by road (18 m.) to the military hill station of *Lansdowne*, which is garrisoned by Gurkha regiments.

73 m. **Nagina station** (D.B.), noted for its work in ebony. It is 19 m. from Bijnor (D.B.), on the O. and R. Railway. Mail carts and ekkas are generally available at Nagina station for **Bijnor** (which is 3 m. from the Ganges). The District of Bijnor is entirely agricultural (population, 800,000; area 1789 sq. m.): game is scarce, even in the forests: no ruins remain of places identified as having been renowned of old. Bijnor was occupied in the Mutiny by the rebel Nawab of Najibabad. The Brahmanical threads (*janeos*) made at Bijnor have acquired a general reputation.

120 m. from Saharanpur is **Moradabad junction** (waiting-rooms at the railway station, and a good D.B. about 2 m. distant) *; it is on the main line of the Oudh and Rohilkhand Railway, 202 m. from Lucknow, with branches running to Delhi, 101 m., Aligarh, 88 m., Kashipur 31 m. The railway station lies to the S.E. of the city (population 81,168) which is on the right bank of the Ramganga River. To N.W. of the town is the civil station, with a Police Training School, the largest institution of its kind. The building is spacious and handsome, and the staff is maintained at the highest point of efficiency. The District has an area of 2285 sq. m. and a population of 1,262,933. The city is noted for its metal work, especially for inlaid work of brass and tin, some of the designs of which are extremely beautiful.

Moradabad is 15 m. from Rampur. The road N.E. towards Naini Tal is only metalled up to the 22nd m., where it crosses the river Kosi by a ferry or bridge of boats, and beyond is not fit for motors. 22 m. S. to Sambhal, 73 m. to Meerut.

About $\frac{1}{2}$ m. N. of the railway station are the *American Church*, and the office of the Tahsildar, and 1 m. from this church is the District School, on the banks of the Ramganga, which is here crossed by a bridge of boats. To the W. of the school is the Badshahi Masjid, dating from 1634, in the reign of Shah Jahan, after whose son, Murad Baksh, the place was named. N. are the ruins of the fort of Rustam Khan, the Rohilla, who founded the city in 1625.

On the outbreak of the Mutiny at Meerut on 10th May 1857 the Judge of Moradabad, Mr Cracroft Wilson, and the Collector, Mr C. B. Saunders, afterwards Commissioner of Delhi, maintained themselves in Moradabad till 3rd June, but were then obliged to fall back on Meerut.

176 m. from Saharanpur is Bareilly junction station* (R., D.B.) (population 129,462). From here one branch of the Rohilkhand and Kumaun Railway runs N. to (66 m.) *Kathgodam*, under Naini Tal, and (30 m.) to *Pilibhit* (D.B.) (see p. 383), and another W. to Budaon, Kasganj, and Agra: an Oudh and Rohilkhand branch line runs to Chandausi and Aligarh on the E.I. Railway (see p. 403).

By road Bareilly is 63 m. to Kathgodam, 47 m. to Shahjahanpur, 52 m. on to Sitapur, and 52 m. farther on to Lucknow; it is 33 $\frac{1}{2}$ m. to Pilibhit, 128 m. to Muttra, 132 m. to Agra. Petrol can be obtained at N.I. Motor Cycle Agency, and also in Cantonments. Accumulators can be charged at the R. and K. Railway Electric Power-house, near the city

station, or perhaps at the Cantonment Electric Light Station.

The city of Bareilly, the capital of the country of Rohilkhand, known in the early history of India as Kather, was originally founded by one Baral Deo in 1537, and was refounded a hundred years later. Ali Muhammad Khan, the first Chief who united the Rohillas under him, between 1707 and 1720, made Bareilly his headquarters, and Hafiz Rahmat Khan (about 1710-1774), who ultimately succeeded him, extended his power from Almora in the N. to Etawa in the S.W. The Rohillas, who were no whit less turbulent than the other fighting elements in India at that period, and who took a prominent share in the dismemberment of the Mughal Empire, ultimately provoked an invasion of the Mahrattas, and to buy them off executed a promise to pay an indemnity of 40 lakhs, for which the Nawab Wazir of Oudh stood surety. These transactions led to the Rohilla War, 1772-4, in which the ruler of Oudh, with the support of British troops, conquered Rohilkhand, Hafiz Rahmat being killed in battle fighting valiantly.¹ Faiz Ullah, son of Ali Muhammad Khan, succeeded to the Chiefship of the Rohillas, and from him the present Chief of the *Rampur State* is descended. Bareilly passed to the British by cession in 1801. In 1816 an insurrection broke out in consequence of the imposition of a new tax on houses, and was suppressed only with the loss of several hundred men killed and wounded.

On the outbreak of the Mutiny in 1857 there were no British troops at Bareilly, but only a native garrison consisting of two Indian Infantry regiments, one

¹ The true narrative of the Rohilla War, which formed one of the articles of impeachment against Warren Hastings, may be read in Sir John Strachey's *Hastings and the Rohilla War*.

Native Cavalry regiment, and one Battery. These revolted on 31st May, shortly after the arrival of fugitives from Ferozepore (p. 352), and the Europeans in the station were obliged to fly for their lives, after a certain number, including the Brigadier-General, had been murdered; the few who remained in the place were afterwards massacred by the order of Khan Bahadur Khan, grandson of Hafiz Rahmat Khan, who had been proclaimed ruler of the country, and who induced the Bareilly Brigade, under Subadar Bakht Khan, to march on 10th of June to Delhi, where their leader was appointed General of the rebel army. From Bareilly four attempts were made on Naini Tal, but they all failed. The English forces retook Bareilly on 7th May 1858, when all the insurgent leaders fled with Khan Bahadur into Oudh. In 1871 the peace of the city was again disturbed by serious religious riots, and since then religious differences have occasionally threatened to develop into actual fighting.

The city of Bareilly contains some fine bazars and mosques. The place is famous for its splendid rows of Bamboos, from which it is commonly called Bans Bareilly; many of these have, however, now disappeared. In the churchyard of the station church is the tomb of Mr Thomason, Lieutenant-Governor of the Province of Agra, 1843-53, to whom, perhaps, more than to any one else, the present systems of land revenue and administration of N. India are due.

220 m. from Saharanpur is Shahjahanpur junction. A branch line runs from here to (39 m.) Mailani junction, on the Rohilkhand-Kumaun line from Bareilly to Lucknow (R.). There are also railways (1) to Pilibhit, 54 m. on the Rohilkhand-Kumaun line, and (2) to Sitapur, 56 m. on the Oudh and Rohilkhand line. Shahjahan-

pur is 48 m. to Fatehgarh. Chief town of a District, with civil station and formerly a military Cantonment (population 71,778), but the Cantonment is now occupied by the Army Clothing Factory and headquarters of the Department, no troops being stationed here now. The station contains an English church and three churches for native converts belonging to the American Methodist Mission, which also supports several schools. The principal local manufacture is sugar. The Rosa sugar factory and rum distillery is situated on the Garra River, a few m. from the city, with which it is connected by railway.

In 1857 the Europeans at the station were attacked by mutineers while at morning service on 31st May, but managed to defend themselves in the church with the aid of some faithful sepoys, and to fall back on Muhamdi, in Oudh, where, however, they were all murdered shortly afterwards.

259 m. Hardoi station (R., D.B.).

322 m. Lucknow junction station (R.). Branch S.W. to Cawnpore, S.E. to Rae Bareilly, E. to Fyzabad, and by the Bengal and North-Western Railway to Bahramghat (Chauka Ghat and Gogra Ghat), and N. to Sitapur and Bhojpur (p. 383).

From Lucknow two lines run to Benares, the direct (187 m.) by Rae Bareilly, which is 370 m. from Saharanpur, and by Pertabgarh, which is 429 m. from Saharanpur, both the headquarters of districts; and the older and longer (209 m.), by Fyzabad, 79 m. from Lucknow, and Jaunpur, 163 m. There is nothing of special interest to note on the former route, though Rae Bareilly, named from the once important tribe of Bhars, contains an old fort of Ibrahim Sharki.

The Bengal and N.W. Railway connecting Oudh with Gorakhpur and Bihar (p. 421) runs alongside

of the loop route to (17 m.) Barabanki junction, and then diverges to (22 m.) Bahramghat. From Gonda, 31 m. beyond the Gogra, two branches turn N. to (38 m.) Bahraich, Naipalganj Road, and Katarnian Ghat, and 24 m. Balrampur, 93 m. Uska Bazar, and Gorakhpur. A branch line of the railway has been opened from Burhwal junction passing through Tahsil Fatehpur (14 m.) to Sitapur junction (60 m.) on the O. and R.R., and R. and K.R. Bahraich is famous for the tomb shrine of Syad Salar Masaud, nephew of the great Mahmud of Ghazni, who was killed here in 1033 A.D. The shrine is about a mile Northwards from the railway station and about 2 m. from the town. Improvements in the buildings have made the place more attractive to visitors. The ruins of Saheth-Maheth, on the borders of the Bahraich and Gonda Districts, mark the site of the ancient city of Sravasti and the famous Buddhist convent of the Jetavana, where the Buddha is said to have preached most of his sermons. The antiquities excavated are now preserved in the Lucknow Museum. The place can best be visited by riding an elephant from Balrampur.

79 m. from Lucknow is Fyzabad junction station (R., D.B.).

Branch to *Ajodhya Ghat* (6 m.), and thence to Bengal and N.W. Railway. The branch is now open only on the occasions of the three big fairs in Ajodhya. A line now connects Fyzabad and Allahabad, running through Sultanpur and Pertabgarh. Another line from Fyzabad to Mughalsarai passes Ajodhya. By road Fyzabad is 79 m. to Gorakhpur, 29 m. to Gonda, 38 m. to Utraula. Petrol obtainable from Messrs Shank Lal, agents of the Assam Company; also from

Messrs Singh & Co., on the main road to Ajodhya.

Fyzabad (population with Ajodhya, 62,446) is the headquarters of a District and of a Division. Once the capital of Oudh, the city has fallen into decay since the death, in 1816, of Bahu Begam, who resided here for many years. The first Nawab of Oudh, S'aadat Khan (1724-1739), seldom resided at Fyzabad, though it was his nominal capital; so also his successor, Safdar Jang (1739-53); but Shuja-ud-daula (1753-75), who succeeded, took up his permanent residence there. When defeated at Buxar he fled to Fyzabad, and constructed the lofty entrenchment whose ramparts of rammed clay still frown over the Gogra. At his death, in 1775, his widow, the Bahu Begam, remained at Fyzabad, while Asaf-ud-daula, the then Nawab, removed to Lucknow. The city is bounded to the N. by the Gogra River, which here divides into two streams, both crossed by pontoon bridges. There is a steamer service between Ajodhya Ghat and Lakarmandi during the rainy season. The Cantonment lies to the N.W. of the Indian city, at the S.W. corner of which the railway to Benares passes. The **Mausoleum of the Bahu Begam**, wife of Shuja-ud-daula, Nawab of Oudh, and mother of Asaf-ud-daula, is the finest mausoleum in the Province of Oudh and its neighbourhood. The cenotaph is of marble, without inscription. The total height may be taken at 140 ft. There is a very fine view from the top. This lady was one of the two Begams of Oudh whose alleged ill-treatment formed a subject of indictment of Warren Hastings on which Burke and Sheridan wasted much misplaced oratory. As a matter of fact, although Asaf-ud-daula and the British officials acting with him did put considerable pressure on the servants of the two Begams (of

whom the mother of Shuja-ud-daula was known as the Mani Begam) to compel them to disclose where the State money of which the ladies had possessed themselves was hid, the ladies themselves were left untouched. It may be added that they wrote letters of condolence to Warren Hastings on his trial! The Mausoleum of Shuja-ud-daula is close by, and is something like the Begam's, but not nearly so grand or imposing. At each of the four corners of the building are an oblong and a square reservoir. In the centre space on the ground floor are three tombstones without inscription. The middle slab is that of Shuja-ud-daula. His mother's is to the W., and that of his son, Mansur 'Ali, to the E. In the W. side of the enclosure is a mosque at the N. end, with an Imambara on the S. The Civil Station Cantonments and environs are beautifully wooded with innumerable tamarind, mango, and other trees.

The Guptar Park is prettily laid out; at the S. end of it is a temple where Rama is said to have disappeared.

6 m. Ajodhya station (Sanskrit *Ayodhya*), on the banks of the Gogra, is the place where the great Ram Chandra once reigned. The ancient city is said to have covered an area of 48 kos, or 96 m., and to have been the capital of Koshala, the country of the Solar race of Kings, of whom Manu was the first. A copper grant of Jai Chand, the last of the Kanauj Rathors, dated 1187 A.D., was found near Fyzabad. The Chinese traveller Hiuen Tsang found at Ajodhya twenty Buddhist monasteries with 3000 monks. According to him, the celebrated Toothbrush-tree of Buddha grew here.

The road from Fyzabad Cantonment to Ajodhya (4 m.) is excellent, and it may be found more convenient than the railway. On

entering Ajodhya the Janam Sthan Temple will be found on the left. In the sanctum, the door of which has a silver frame, are images of Sita and Rama. Rama has a gleaming jewel of large size, which looks like a light-coloured sapphire. The temple is an oblong of about 200 ft. by 150 ft. The walls are 45 ft. high, and seem strong enough for a fortress; which justifies its name of *Hanuman Garhi* ("Hanuman's Fortress"). The neighbouring trees swarm with grey monkeys.

To the N.W. is the temple of Kanak Bhawan, or Sone Ka Garh, with images of Sita and Rama crowned with gold, whence the name "Hall of Gold." This is said to be the oldest temple of all.

The Janam Sthan, or place where Ram Chandra was born, is $\frac{1}{2}$ m. W. of the Hanuman Garhi; it is a plain masonry platform, just outside a temple, but within the enclosure on the left-hand side. The primeval temple perished, but was rebuilt, and was converted by Babar into a mosque. Europeans are expected to take off their shoes if they enter the building, which is quite plain, with the exception of twelve black pillars taken from the old temple. On the pillar on the left of the door on entering may be seen the remains of a figure.

At about $\frac{1}{2}$ m. to the N. of Janam Sthan is Swarga Dwara, or Ram Ghat, where Rama was cremated. S.W. is Lakshman's Ghat, where Lakshman, the half-brother of Rama, used to bathe. 1 m. to the S. of Hanuman Garhi is the *Mani Parbat*, and to its S. again are the *Kuwer Parbat* and *Sugriv Parbat*, mounds of great antiquity. The *Mani Parbat* Hill is 65 ft. high, and is covered with broken bricks and blocks of masonry. The bricks are 11 in. square and 3 in. thick. At 46 ft. above the ground, on the W. side, are the

remains of a curved wall faced with *kankar* blocks. General Cunningham supposes that the great monastery described by Hiuen Tsang is the Sugriv Parbat, which is 560 ft. long by 300 ft. broad, and that the Mani Parbat is the Stupa of Asoka, built on the spot where Buddha preached the law during his six years' residence at Saketa.

163 m. from Lucknow is JAUNPUR City (36 m. from Benares, 57 m. from Allahabad, 44 m. from Mirzapur station (R., D.B.)). There are two stations—the O. and R. Railway and the B. and N.W. Railway—at Jaunpur; the Civil Lines, or Zafarabad station, is 4 m. farther on. There are no shops for petrol or motor repairs. The town is celebrated for the manufacture of perfumes.

Jaunpur¹ (population 32,880), named after Juna Khan, known as Muhammad bin Tughlak (1325-51), and founded by Firoz Shah Tughlak in 1360 (pp. 270-1), is a place of much interest. Vast Hindu temples and Buddhist monasteries stood here near the Gumti; there are many little tombs and shrines, in which, says Fergusson (1, 228), the Muslims have used up Hindu and Jain pillars. Jaunpur was the capital of an independent Muhammadan kingdom (the Sharki, or Eastern, dynasty) from 1397-1478, and retained a partial independence until finally conquered by Akbar in 1559. The stone Bridge, 654 ft. long, over the Gumti, was erected in the reign of that Emperor. It consists of ten spans, besides those standing on the land, the middle group of four being larger than the three at each end. It was designed by Afzal 'Ali, a Kabuli architect, at the

expense of Munim Khan, one of Akbar's high officers. It was commenced in 1564 and completed in 1568, and is said to have cost £300,000. Formerly there were shops on either side, but these were destroyed during the flood of 1774: subsequently they were rebuilt, and there are now 74 shops on either side of the bridge. At a market-place at the S. end of the bridge is a stone lion somewhat larger than life, which was found in the fort. Under it is a young elephant, which it is supposed to have seized. From this all distances in the city and province were calculated.

Near the bridge on the left bank is the Fort (built in 1360 A.D.) of Firoz, containing the Fort Masjid, almost entirely constructed from ruined temples. The entrance gate, 47 ft. high, is covered with *kashani hak*, a sort of blue and yellow enamelled bricks, of which beautiful portions remain. The inner gate has many stones of Hindu temples built into the walls, on some of which is carved a bell. At 200 ft. from this gate is a low mosque, 130 ft. by 22 ft., divided into three chambers by lateral walls, with a reservoir in front, and a remarkable lat, or *minar*, apparently unaltered since its erection, and beautifully inscribed. The river-face of the Fort is 300 ft. beyond this pillar. It is 150 ft. in perpendicular height, and commands a noble view of the country and city. Before reaching it a round tower, called the magazine, will be noticed, with a *hammam*, or bath, on the left.

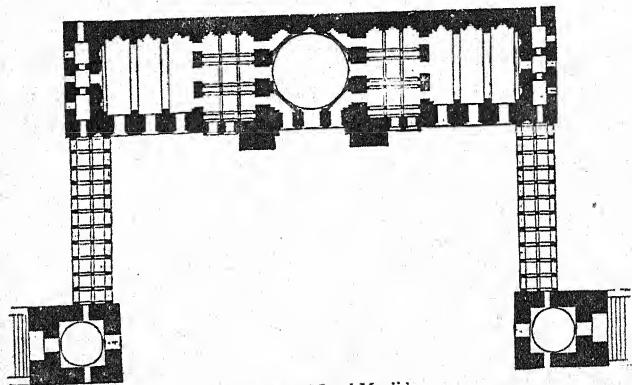
Some 400 yds. to the N. of the bridge and fort, and not far from the *Post Office* and *Town Hall*, is the N. entrance of the *Atala Masjid*,¹ erected in 1408 on the site of an old Hindu temple dedi-

¹ For the architecture of Jaunpur a volume published by Messrs Führer and Smith of the Archaeological Survey of India, entitled the *Sharki Architecture of Jaunpur* (Trübner), may be consulted, and Fergusson's *Indian Architecture*, 2, 222.

¹ The chief features of the Jaunpur mosques are the use of Jain materials, the two-storeyed arcades, the great gates, and the large central screen arches of the mosque proper.

cated to the goddess Atala Devi, which was destroyed in Sultan Ibrahim's reign (1401-40) and the materials used up for the mosque. On the principal *mihrab* ("arch"), built of black marble, immediately in the centre of the main W. wall of the Masjid proper, in which the prayers are said, is a verse from the Koran, and above it the creed. The façade is 75 ft. high. Almost in the centre of the large courtyard, and to the N.E. of the *musallah*, or praying-ground, is a well with a fine citron-leaved Indian fig-tree (*Ficus venosa*). At the S.W. corner of the large

Some attribute the design to Ibrahim, as his family lie in the cloistered court of a building adjoining the N. side of the Masjid. On entering the S. gate an inscription (upside down) in Sanskrit, of the 8th century, will be seen on one of the outer voussoirs of the exterior arch; another in Tughra characters over the top of the central *mihrab*; and a third in Arabic characters around the outer margin of the arch. The N., S., and E. sides are in a dilapidated condition, and were probably destroyed by Sikandar Lodi. The N. and S. entrance-gates have



West half of Jami Masjid.

square is a chamber screened by a lattice of stone, intended for the women. Leading from it to the roof is a staircase. Behind the propylon, screening the dome from the courtyard and surrounding three sides of the drum of the dome, is a chamber some 11 ft. high and 6 ft. wide.

$\frac{1}{2}$ m. N.W. of the Atala mosque, raised on a platform some 20 ft. in height, is the splendid Jami Masjid, built by Sultan Hasani (1452-78),¹ commenced by Shah Ibrahim 1438, finished after 1478.

¹ This King was conquered by Sultan Bahlol Lodi, of Delhi, but was allowed to remain in Jaunpur.

been restored, and are surmounted by domes. In the cloisters and walls many stones from Hindu temples have been utilised. Its general arrangement resembles that of the Atala and the Lal Darwaza Mosque (see p. 379), and the façades are not unlike, although the cloisters here have three tiers, whilst those at the Atala have only two. The mosque proper is very massive, almost fort-like in construction. It measures 59 ft. by 235 ft., including the thickness of the walls but not the bastions at the angles. It is divided into five compartments on the ground floor, and above are

two zenana chambers, one on each side of the grand dome, with splendid stone carved ceilings. On the E. side is an immense propylon 80 ft. high, divided by string courses into five storeys.

N. of the mosque is the burial-ground of the Sharki Kings, the walls of which approach the N. wall of the mosque within 30 ft. In the quadrangle is the tomb of *Ghulam 'Ali*, with a fine Persian inscription. In the centre, beyond this tomb, is that of *Sultan Ibrahim Shah*. The only inscription is on a round stone in the centre, which has the Kalima.

Next to the tomb of Ibrahim is that of his grandson, Sultan Hasan Shah.

Besides those already mentioned, six other mosques deserve visiting : (1) The Charungli, or Mosque of Malik Khalis Mukhlis, built on the site of the favourite temple of Vijaya Chandra, which was broken down by Malik Khalis and Malik Mukhlis, by order of Sultan Ibrahim. In one of the pillars is a black stone, still worshipped by the Hindus. (2) *Chachakpur Mosque*, called Jhanjhri Masjid on account of the "screen-like" appearance of its ornamentation, was a temple built by Jai Chandra, and converted by Ibrahim into a mosque. (3) To the W. of the city is the Lal Darwaza Mosque, so called in memory of the "high gate painted with vermilion" belonging to the palace erected close by at the same time by Bibi Rajo, Queen of Sultan Mahmud (1440-52). This is the smallest of the Jaunpur mosques. The style of architecture is the same as that of the Jami and Atala Masjids, but the building throughout is on a less massive and much lighter scale. The date is uncertain, though probably the cloisters of the court were erected about 1447. On the N., S., and E. sides of the court are massive gate entrances. The cloisters are two bays deep, and the W. walls,

as well as the cloisters, are panelled. The columns deserve study on account of their variety. The propylon, the principal feature of the building, standing in the centre of the W. façade, is 48 ft. 6 in. high, and is wider at the base than the top. The towers contain staircases leading to a mezzanine floor on each side of the dome. The principal mihrab is of black stone. On the top of the architrave is an Arabic inscription. (4) Mosque of Nawab Muhsin Khan. Sukh Mandil, who was the Diwan of Khan Zaman Khan, had built a temple where this mosque stands. When Khan Zaman was killed the building came into the hands of Muhsin Khan, one of Akbar's courtiers, who destroyed the temple and built a mosque. (5) The Mosque of Shah Kabir, built by Baba Beg Jalagur, governor of Jaunpur in Akbar's reign, in 1567, in honour of the saint Shah Kabir. (6) The *'Idgah Mosque*, built by Sultan Hasan, and repaired in Akbar's reign by Khan Khanan. Afterwards it fell into a ruinous state, and was deserted till restored by Mr Welland.

167 m. Zafarabad station for the Civil Lines of Jaunpur. The Church (Holy Trinity) contains a tablet to Manton Collingwood Ommaney, B.C.S., Judicial Commissioner of Oudh, who rebuilt it in 1852, and died at Lucknow during the siege. A few officers were killed on the outbreak of the Mutiny at Jaunpur in 1857, but the majority of the Europeans escaped safely to Benares.

The mosque of Shaikh Barha, in Zafarabad, composed wholly of Jain materials, is the oldest at Jaunpur.

509 m. from Saharanpur by Rae Bareilly Benares station (see Route 4)

519 m. Mughalsarai junction station, with the East Indian Railway (see p. 46).

(b)

Lhaksar (p. 372).

16 m. Hardwar station (population 28,682; height above sea-level is 1024 ft.) is situated on the right bank of the Ganges, at the southern base of the Siwalik range, at the mouth of a gorge through which that great river enters the plains. It should be seen by all travellers. The canal bank is closed by locked gates at intervals, so the key should be obtained from the canal office. The Ganges here divides into several channels, intercepted by large islands, many of which are placed beyond the reach of high flood-water. One of these channels commences about $2\frac{1}{2}$ m. above Hardwar, and flows by it, and by Mayapur and Kankhal, rejoining the parent stream a little below the last town. The Ganges canal system commences at Hardwar, the head-waters being taken from a spot on this bank between Mayapur and Kankhal.

The new Bhimgoda headworks are designed to remove difficulties in controlling supply of water for the Ganges Canal. The length of the weir is 2000 ft., divided into six bays of equal length. It will be able to pass a flood of 445,000 "cusecs" over the crest. A new supply channel is being constructed.

The town is of great antiquity, and has borne many names. It was originally known as Kapila, or Gupila, from the sage Gupila, who passed a long period here in religious austerities at a spot still called Kapila Sthana.

In the 7th century A.D. the Chinese pilgrim Hsien Tsang visited a city which he calls Mo-Yu-Lo, which General Cunningham identifies with Mayapur,

a little S. of the modern Hardwar.¹ Timur sacked the place in January 1399. The name of Hardwar, "Door of Hari or Vishnu," is comparatively modern, and probably does not date farther back than 1400 A.D.

The great object of attraction is the temple of *Gangadwara* (see p. 381) and the adjoining bathing ghat. This ghat has its name from the *charan*, or footprint of Hari, impressed on a stone let into the upper wall, which is an object of great veneration at the annual gathering. Each pilgrim struggles to be first to plunge into the pool after the propitious moment has arrived, and stringent police regulations are required to prevent the crowd from trampling one another to death and drowning each other in the sacred water. In 1819, 430 persons lost their lives in this manner, after which accident Government built the present enlarged ghat of 60 steps 100 ft. wide. The advantages supposed to be derived from bathing in the Ganges are the cleansing from all sins. The great assemblage of pilgrims takes place on the 1st of Baisakh (March-April), the day on which the Ganges is said to have first appeared, and when the Hindu solar year begins.

Every twelfth year, the planet Jupiter being in Aquarius, a feast of peculiar sanctity occurs, called a *Kumbh-mela*, attended by enormous crowds. In ordinary years the pilgrims amount to 100,000, and at the *Kumbh-mela* to 300,000. Riots and bloody fights used to be common; in 1760, on the last day of bathing (10th April), the rival mobs of the Gosain and Bairagi sects had a battle, in which 18,000 are said to have perished. In 1795 the Sikh pilgrims slew 500 Gosains. The last *Kumbh-mela* in April 1915 passed off quietly: it was estimated that between 500,000 and 600,000 were

¹ For the ancient history of Hardwar, see *Archaeol. Rep.* 2, 231.

present on the great bathing day : elaborate railway, lighting, and sanitary arrangements were required and made.

Gangadwara is celebrated in the Puranas as the scene of Daksha's sacrifice, to which he neglected to invite Siva, the husband of his daughter Sati. Sati attended the sacrifice in spite of Siva's warning not to do so, and was so shocked at her father's disrespect that she went to the bank of the Ganges, and by her own splendour consumed her body. Enraged at Sati's death, Siva produced Virabhadra, who cut off Daksha's head and threw it in the fire. Siva restored Daksha to life, but as his head had been consumed, replaced it with that of a goat or ram. The spot where Daksha is supposed to have prepared his sacrifice is now marked by the *Temple of Daksheshwara*, a form of Siva. It is at the S. end of Kankhal, $2\frac{1}{2}$ m. below the bathing ghat. Around the temple are several smaller ones of no interest.

There are three *old temples* at Hardwar—to Narayana-shila, to Maya-devi, and to Bhairava.

The *Temple of Narayana-shila* is made of bricks, $9\frac{1}{2}$ in. square and $2\frac{1}{2}$ in. thick, and is plastered on the outside. The *Temple of Maya-devi* is built entirely of stone, and General Cunningham thinks it may be as old as the 10th or 11th century. The principal statue, which is called Maya-devi, is a three-headed and four-armed female in the act of killing a prostrate figure; in one hand is a discus, in another what resembles a human head, and in a third a trident. Close by is a squatting figure with eight arms, which must be Siva, and outside the temple is the bull Nandi. Outside the *Temple of Sarvanath* is a statue of Buddha under the Bodhi-tree accompanied by two standing and two flying figures. On the pedestal is a wheel, with a lion on either side.

From Hardwar many pilgrims proceed to visit the shrine of Kedarnath, a name of Siva, and that of Bhadrinath, far up in the Himalaya Mountains.

48 m. from Lucknow Dehra Dun (or Doon) is the headquarters of the Dehra Dun District. By road Dehra Dun is 43 m. to Roorkee, 60 m. to Chakrata (D.B.), (population 54,812), 43 m. to Saharanpur, 7 m. to Rajpur, 31 m. to Hardwar. Petrol usually obtainable from Fitch & Co., on the Rajpur road. At Kalsi, 32 m. from Dehra Dun, on the Chakrata Road, near the D.B., on the right bank of the Jumna, is the Kalsi stone, inscribed with an edict of Asoka. Dehra itself (85,886 inhabitants) is prettily situated in the midst of a mountain valley 2300 ft. above sea-level. It was founded by Guru Ram Rai, who settled in the Dun at the end of the 17th century. His temple, on the pattern of the mausoleum of the Emperor Jahangir at Shahdara, forms the chief ornament of the town. At Dehra Dun is the Indian Forest School, to which is attached an exceedingly pretty Botanical Garden. The place is also the headquarters of the Vice-regal Bodyguard.

In the earliest ages of Hindu legend Dehra Dun formed part of a region known as Kedarkhand, the abode of Siva, from whom also the Siwalik Hills are called. Here Rama and his brother are said to have done penance for killing Ravana, and here the five Pandus stopped on their way to the snowy range where they immolated themselves. Authentic history knows nothing of Dehra Dun till the 17th century, when Ram Rai was driven from the Panjab and the Sikh Guruship on account of doubts as to his legitimacy. In 1757 Najib-ud-daula, Governor of Saharanpur, occupied the Dun, but he died in 1770, when the country was swept by various

invaders, last of all the Gurkhas. At the end of the Gurkha War, in 1815, these ceded the country to the British, who had easily occupied Dehra, and taken the strong hill fortress of Kalanga after a gallant defence, in which Sir Rollo Gillespie, the gallant soldier who suppressed the Mutiny at Vellore (p. 537), was killed. There is a monument to the slain a short distance from Dehra.

The approach to Mussoorie from Dehra is by *Rajpur* * (7 m.), a large native village, and at an elevation of about 3000 ft. (tonga, Rs.3, as.12, Rs.3, Rs.2, as.4). The road from Rajpur to Mussoorie are very steep, and the journey can be made only by pony (Rs.3) or dandy (Rs.5).

About half-way up is *Jharipani*, a halting-place, where there is water and a bazar; and here, at an elevation of 5000 ft., are the first houses of the European residents.

4 m. Mussoorie, * a hill station (population 17,420), and *Landour*, the adjacent Convalescent Depot for British troops, are situated upon one of the outer ranges of the Himalayas, which lie to the N. of Dehra Dun. The hill on which Mussoorie is built rises from the plains in the form of a horse-shoe, gradually ascending to the centre, and enclosing in the hollow a number of ridges, which lose themselves in the mass above. Ridges also run down from the back of a hill to a valley in which flows a tributary of the Jumna; between the ridges N. and S. are deep, wooded gorges. The greater number of the houses are built at an elevation of from 6000 to 7200 ft., mainly on the S. side of the hill. The view from Mussoorie over the valley of the Dun and across the Siwalik Hills to the plains is very beautiful, as also is the view towards the N., which is bounded by the peaks of the snowy range. The hills, on the side

nearest the plains exposed to the prevailing winds, are nearly bare, and the visitor misses the pine and deodar forests which form so beautiful a feature at Simla and other Himalayan stations. To the N., however, not far below the ridge, trees are plentiful. They are principally oak, rhododendron, and fir. In sheltered places apricots, apples, pears, and cherries flourish, together with many English annual and perennial plants. The climate is delightful.

Landour * (population 3,518) is a little to the S.E. of Mussoorie, connected with it by a narrow spur 200 yds. long and from 20 yds. to 30 yds. in breadth, with a sheer precipice of from 80 ft. to 100 ft. on either side. It rises rather abruptly to the Landour Hill, the highest point of which is about 900 ft. above the average of the Mussoorie ridge. The houses and barracks are built upon the ascending slope of the spur and upon the precipitous slopes of the ridge. The barracks face the S. There is a permanent Anglo-Indian population at Landour and Mussoorie, and a large influx of visitors during the hot season. English and Roman Catholic churches exist at both places, with numerous schools and boarding-houses, and at Mussoorie a public library, masonic lodge, club, brewery, and three banks.

There is a good road from Mussoorie (148 m.) to Simla *via* Chakrata, a military hill station 7000 ft. above the sea, in the centre of the District called Jaunsar Bawar (21 m.). The accommodation on the way is, however, not large, though there are forest R.Hs. at most halts, and tents, food, and servants should be taken (see p. 291). The number of marches is twelve. The highest point crossed is the Patemalla Mountain (9368 ft.), 33 m. from Simla.

(c)

Bareilly (see p. 373).

11 m. Bhojeepera junction. The main Rohilkhand-Kumaun line runs from here E. and S. to 36 m. Pilibhit, 115 m. Lakhimpur, 143 m. Sitapur, and passing through the old Cantonment of Mariaon, to 198 m. Lucknow. One of the saddest incidents of 1857 occurred in connection with the Europeans at Sitapur, where the troops mutinied on 3rd June. Those who escaped suffered the extremity of distress for four months at one time in the jungles, at another in the custody of false friends; and the few who remained were ultimately sent to the Kaisarbagh in Lucknow (p. 397). Of the whole number only one child, smuggled into the Alambagh by a trusty Indian, and two ladies were finally saved.

The Rohilkhand-Kumaun line runs N. to Kathgodam. The other railways from Sitapur are (a) a branch metre-gauge line to Shahjahanpur, and (b) a branch, of the Oudh and Rohilkhand line, to Balamau, connecting with the main line to Bareilly.

64 m. from Bareilly is Kathgodam (R.) terminus station. * By road it is 63 m. from Bareilly to Kathgodam; and on to Naini Tal the distance is 21 m. There is direct tonga and motor service from Kathgodam to Naini Tal. From the railway station the country is flat for 2 m. as far as Rani-bagh (D.B.). The road then ascends the valley of the Balaya, amidst picturesque scenery, with waterfalls flowing down deep ravines, to (12 m.) Brewery. Here the steep ascent of the ghat (3 m. to Naini Tal) commences. On the way up "Douglas Dale," a pleasant halting-place, is passed.

Naini Tal, * (D.B.) (population 18,027) is 21 m. by the cart-road from Kathgodam. It is a favourite sanatorium of the United Provinces, and the summer residence of the Lieutenant-Governor, and of the General Officer commanding the 7th Meerut Division. It is extremely picturesque, the lake forming a most striking feature; but for travellers with a limited time at their disposal it does not possess the attractions of Darjeeling or Simla. The highest peaks are to the N.W.—as China, which is 8568 ft. above sea-level, Deopatta, 7589 ft., etc.

The Lake is nearly 1 m. long and 400 yds. broad, with an area of 120 acres. The flood-level is 6410 ft. above the sea. The depth ranges from 5 fathoms at the N. end to 15½ in the broadest part; and there are Sulphur Springs at the end near the Convalescent Depot.

The principal residences lie to the N.W. of the lake, where, close to the shore, are the *Assembly Rooms* with *Library*, and the *Masonic Hall*, the *Club* about ½ m. farther, the *Post Office* lying on the way, and some *European shops*. The *Cricket*, *Polo*, and *Lawn Tennis Grounds*; the *Racquet-court*, *Bathing-sheds*, *Billiard Rooms*, and *Public Gardens* are all near the Assembly Rooms. There are numerous *Educational Institutions*, including a *Kindergarten*. The *Lady Dufferin Hospital* was opened in 1890.

The *Church of St John in the Wilderness*, ½ m. beyond the Club, is built of stone. It has a roof of dark-coloured wood, and has two stained-glass windows. There is a handsome brass under the window on the N. side of the communion-table, in memory of Cuthbert Bensley Thornhill, C.S.I.

On 18th September 1880 a sad catastrophe occurred at Naini Tal. On Thursday, the 16th of September, rain fell in torrents, and continued during Friday and Satur-

day, by which time 33 in. had fallen in the twenty-four hours. The Victoria Hotel, which stood about 280 yds. to the N. of the N. corner of the lake, had a lofty hill at its back. At ten o'clock on the morning of Saturday, the 18th, a slight landslip occurred on the spur of the hill behind the hotel, crushing in the outhouses and a portion of the rear of the premises, and burying several Indians and one European child. The Assistant-Commissioner, Mr Leonard Taylor, with some police and labourers, came at once to render assistance, and sent for the military, who hastened to the spot under the command of Captain Balderstone. The work of extricating the dead and wounded went on till 1.30 P.M., when in a moment the whole precipitous cliff overhanging the spot fell with a tremendous roar, burying at once the hotel, the soldiers, the assembly rooms, library, orderly room, road, and garden. Almost every person in the buildings and grounds was entombed, and it was utterly impossible to extricate any of them.

There is a pretty ride on the W. side of the lake, where the visitor may ascend to a considerable height. But the finest views will be obtained on the E. side—e.g., from Sher ka Danda, whence the snowy mountains beyond Almora and Ranikhet may be seen.

An excursion may also be made by a very pretty road from Naini Tal to Bhim Tal, 12 m. (bungalow and fishing), to Naukuchia Tal, 2 or 3 m. from Bhim Tal (camping-ground and fishing), and to Malwa Tal, 10 m. from Bhim Tal over the hills, a very pretty lake (bungalow; fishing and good shooting procurable). From Bhim Tal it is possible to return direct to Kathgodam (7 m.).

The stages on the round route to Ranikhet and Almora are as below; the direct route from

Kathgodam to these places is by Bhim Tal. There is a good cart-road from Naini Tal to Ranikhet, and Almora, but not from Almora direct to Naini Tal. Pony to Ranikhet or Almora, Rs.7, 8 as.; dandy, Rs.3, 2 as.

The distances by cart-road are: Naini Tal to Ranikhet, 36 m.; Ranikhet to Almora, 29 m.; Ranikhet to Ramnagar, 61 m. These roads can all be used by motors, except the last-named, on which 7 m. of the 61 m. are unfit; but some of the bends are sharp. The ruling gradient is 1 in 20, but is sometimes steeper.

Nos.	Names of Stages.	Miles from Stage to Stage.
1	From Naini Tal to Khairna D.B.	12
2	From Khairna to Ranikhet D.B.	15
3	From Ranikhet to Majhkali D.B.	8
4	From Majhkali to Almora D.B.	16
5	From Almora to Peora D.B.	10
6	From Peora to Ramgarh D.B.	10
7	From Ramgarh to Naini Tal	13
	Total	84

At Khairna, on the Kosi River, is mahsir fishing, also gooral shooting, and a few leopards in the hills. From Khairna to Almora by the river is rough going.

Ranikhet (D.B.), with Chaudhatta, an important military hill station. Population 8781. Elevation between 6000 ft. and 7000 ft. The views of the Himalaya snows from this station are very grand.

Almora, * (D.B.), the chief town of the Almora District, 5500 ft. above sea-level; population, 10,560. There was much severe fighting round Almora in the

Gurkha War, and the place is now a station for two battalions of Gurkhas. It is also resorted to by persons with weak lungs. The views of the snows are fine. In the neighbourhood are the *Jalna* and *Binsar fruit orchards*.

Almora to *Pindari Glacier*, six marches (D.B. on the way, but no supplies or attendance). Best time of year, May, September, or October.

Bazar, on the N. side, opening on to the Machhi Bhawan, and the shrine of Hazrat Abbas, to the S.W. of this. The chief art products of the city are silver work and the clay models which have largely taken the place of the terra-cotta models for which Lucknow was famous a few years ago. "*Bidri*" and "*Zarbaland*" work will soon be a lost art, as there are only two craftsmen left, and they pick up a very precarious existence from their few sales. Lucknow, by reason of its climate, parks, and gardens, and its many interesting sights, is a charming place at which to make a stay. It cannot possibly be well seen under two and a half days.

Short Description of Lucknow and of the Places of Interest in it.

ROUTE 21.

LUCKNOW (Lakhnau) (p. 374) (R.) *, is 619 m. from Calcutta by the E.I. Railway and O. and R. Railway, and 885 m. from Bombay by the G.I.P. Railway. By road Lucknow is 79 m. to Fyzabad, 52 m. to Sitapur, 67 m. to Hardoi, 49 m. to Cawnpore, 51 m. to Rae Bareli.

The Oriental Motor Company has a garage on the Hazratganj road; other garages are the Upper India Motor Company, on the Shah Najaf Road; H. G. Procter, and the Oudh Motor Works, Outram Road; Eduljee Company: The Exchange.

The city covers 36 sq. m., and has a population of 259,798, including the Cantonments, of whom less than three-fifths are Hindus, and the Muhammadans about 100,000. It is situated in lat. 26° 51', long. 80° 58', and is the largest city in the Indian Empire after Calcutta, Madras, Bombay, and Hyderabad. It has been the capital of Oudh since 1775, but contains very little of interest outside the Chauk

Lucknow stands in a bend of the Gumti, the Residency on the N. and the Martinière on the E. being equidistant (2½ m.) from the Charbagh. W. of the Northern line from this point is the city, with the Machhi Bhawan, the Imambara, and the Jami Masjid between it and the river; and E. of it is the Civil Station, with the palaces and other buildings of the Kings of Oudh, on the N. up to the river-bank; and the present Cantonment, headquarters of the 8th Army Division, with the Martinière and Dilkusha Park on its N.E. sides on the S. The royal buildings from the Residency to the E. are the Tehri Kothi; the Chhattar Manzil palaces, including the Farhat Baksh, now a portion of the U.S. Club: the Chhota Farhat Baksh, used as a Circuit House: Chhattar Manzil Khurd: Bilas Kothi, and the Gulistan-i-aram, used as Government Offices: and the Lal Barahdari, near the public library: the Kaisarbagh, with its mausolea standing back a little to the S.; the Moti Mahal, on the river, with

the Khurshid Manzil and Tara Kothi S. of it; and the Shah Najaf, Kadam Rasul, and Sikan-darbagh at the extreme E. end. Here the river takes a sharp bend to the S., and W. of this and S. of the Sikandarbagh come in succession the Wingfield Park, and across the canal which skirts the S. of the city and the Civil Station, the Martinière, and the Dilkusha palace. From the W. side of the park a broad thoroughfare (which is known in its central portion as Hazratganj, and has the buildings known as the Begam Kothi, a portion of which—the Kothi Sultan Inaiyat—is now used as a Post-Office, and the Makbara of Amjad Ali Shah on its E. side) forms a chord to the arc of the river, and, passing the N. of the Kaisarbagh, ends at the Residency. From the S.E. end of Hazratganj, just N.E. of Government House (once known as Banks' House), Outram Road leads N.E. to the Sikandarbagh, and Abbott Road (on which all but one of the principal hotels are situated close together) leads S.W. to the railway station and the city. The hotels—except the Carlton Hotel, which is at the junction of the Shah Najaf and Clyde Roads—are about $1\frac{1}{2}$ m. S.W. of the Sikandarbagh, and nearly 2 m. S.E. of the Residency by the direct routes of Cantonment Road, or Banks' Road, which unite in Cawnpore Road after passing the back of the Kaisarbagh and the Roshan-ud-daula Kothi, about $\frac{3}{4}$ m. from the Residency. The Alambagh lies $1\frac{1}{4}$ m. S.W. of the Charbagh. From the latter the La Touche Road runs due N. past the Aminabad Park, of 8 acres, to the Residency, while a fine broad road has been constructed from the junction of Abbott and Station Roads, running almost due W. to the Victoria St., in four sections, known respectively as Hewett Road, Sri Ram Road, Ganga Pershad Road, and Nadan Mahal Road. On the last is the tomb of

Shaikh Abdur Rahim, the first Viceroy of Oudh under the Emperor Akbar.

History.

Lucknow is of recent origin, and owes its creation to the Nawabs of Oudh, generally known as the Kings of Oudh, a title accorded by the British in 1819. The first three of these, S'adat Khan Burhan-ul-mulk (1732-39), Mansur Ali Khan, known as Safdar Jang (p. 274) (1739-53), and Shuja-ud-daula (1753-75), who joined issue with the British at the battle of Buxar (1764), resided at Fyzabad, and the last of these is buried there. His son, Asaf-ud-daula, removed the capital to Lucknow, which under him grew into a great city; the badge of the fish which appears on so many of the royal buildings is the mark of rank granted by the Emperor of Delhi to the Oudh Nawabs. It will be sufficient to note here the names of the rest of the Rulers of Oudh and the buildings with which they adorned their capital. No reigning dynasty of India ever showed such a series of vicious and incompetent Chiefs as the last of these. Any one who may have any doubts as to the condition of the Province of Oudh under them has only to read the journals of Sir Wm. Sleeman to realise what their rule meant—a rule continued unchanged, in spite of threats and warnings, for a period of thirty years. The buildings at Lucknow are nearly all of a degraded and barbarous type of architecture, and apart from the two tombs in the Kaisarbagh and the Jami Masjid, not one of them possesses any real architectural merits, though the large hall of the great Imambara is a very grand room,

Asaf-ud-daula (1775-97), built the Daulat Khana Palace, the great Imambara and its mosque, the Rumi Darwaza, Khur-

shid Manzil, Bibiapur Kothi, Chinhat Kothi, Residency Kothi, the Charbagh and Aishbagh. (The Machhi Bhawan Palace is shown by some authorities as built by the Shaikhs, and by others as built by Nawab Shuja-ud-daula.) Asaf-ud-daula built a palace on the river-bank adjoining the great Imambara, but it was not known as the Machhi Bhawan Palace, it was called the Moti Mahal, and the original building, according to the Ain-i-Akbari, is credited to Shaikh Abdar Rahim. It is doubtful whether Asaf-ud-daula built it. The picture in the Warren Hastings Collection proves that it was not on the Machhi Bhawan site.

Saadat Ali Khan (1798-1814), the best of his line. Built the Moti Mahal and Dilkusha, the Throne Room (Lal Barahdari), and the King's Stables; also the Residency, and other buildings, and bought the Farhat Bakhsh Palace from General Martin.

Ghazi-ud-din Haidar, first king of Oudh (1814-27). Built the Kaisarbagh tombs, the Tomb at Shah Najaf, and constructed the canal on the S. side of the city.

Nasir-ud-din Haidar (1827-37). Built the Chhattar Manzils.

Muhammad Ali Shah (1837-1842). Built the Husainabad Imambara and Tank, the Sat Kanda, the Jami Masjid, and the Badshahbagh.

Amjad Ali Shah (1842-47), built the Hazratganj Imambara.

Wajid Ali Shah (1847-56), built the Kaisarbagh Palaces and Sikandarbagh. In February 1856 Wajid Ali Shah was deposed, and on 13th March removed to Calcutta. General Outram, who was Resident at the time, became

First Chief Commissioner of Oudh. The ex-King lived thirty years in Calcutta, and there he died in 1887, aged sixty-eight. Portraits of most of the Kings of Oudh will be found in the Barahdari in the Clock Tower gardens fronting the Husainabad Tank.

The best books upon the siege of the Lucknow Residency are perhaps Mr M. Gubbins' *Mutinies in Oudh*, Lady Inglis' *Siege of Lucknow*, Lieutenant - General M'Leod Innes' *Lucknow and Oudh in the Mutiny*, and Sergeant Forbes Mitchell's *Reminiscences of the Great Mutiny*. The Lives of Sir Henry Lawrence, Sir Henry Havelock, Sir James Outram, and Sir Colin Campbell (Lord Clyde), will also be found full of interest, and most instructive of all are the volumes of Mutiny papers relating to Cawnpore and Lucknow recently edited by Sir G. W. Forrest, which contain a number of photographs of the date of 1857-8.

An unusually good local guide has been published by Mr E. H. Hilton, who, as a Martinière boy, shared in the defence of the Residency.

The Mutiny of 1857.

That the annexation of Oudh—from which the great mass of the high-caste¹ soldiers of the native army then came—justifiable and necessary as it was, became one of the principal causes of the sepoy mutiny of 1857, is beyond doubt. As it happened, General Outram had been compelled to take leave in May 1856. Mr C. C. Jackson acted for him until March 1857, when he was succeeded by Sir Henry Lawrence, a bare seven weeks before the outbreak of the Mutiny at Meerut and Delhi.

¹ About 40,000 men. Nearly double this number had been discharged from the Oudh army.

At that time the garrison of Lucknow consisted of three Bengal Indian Infantry regiments and one regiment of Light Cavalry, two regiments of Oudh Infantry, a regiment of Military Police, and three Indian batteries of Artillery, in all about 7000 men, the European force consisting of H.M. 32nd Regiment under Lieutenant-Colonel Inglis and one battery of Horse Artillery less than 1000 strong.

Already there had been a mutiny at Lucknow of the 7th Oudh Irregular Infantry at the Musabagh on 3rd May. Major Gall, commanding the 4th Irregular Cavalry, on being informed of the imminent danger of the European officers, galloped up to the vicinity with his troopers, and soon after Sir H. Lawrence arrived with a mixed force of Europeans and Indians. The mutineers then broke and fled; some were made prisoners, and others gave up their arms. On 12th May, before the news of Meerut and Delhi had reached Lucknow, Sir H. Lawrence held a darbar in the Cantonment Residency, and harangued the troops and promoted two Indian officers who had given information of the intended outbreak; and this gave confidence for a short time until the malcontents perceived that the Government was unable to take immediate steps to recover Delhi. Then it soon became apparent that nothing could prevent further serious trouble, and Sir H. Lawrence quietly set about collecting supplies in the Residency and the Machhi Bhawan to provide against all possible contingencies, and two Companies of H.M.'s 32nd Regiment were placed in the former. On the 23rd May two detachments of cavalry sent to Cawnpore to clear the road between it and Agra mutinied near Mainpuri, and killed one of their officers, the rest escaping by flight.

On the 30th May mutiny broke

out in the Mariáon Cantonment, 3 m. N.E. of Lucknow across the Gumti, and quickly became general. Brigadier Handscombe was shot dead, and the mutineers attacked Sir Henry and his staff at the artillery ground, but were driven off with some rounds of grape, which killed many of them. On the 31st of May a Mr Mendes was murdered in his own house in the city, and martial law was proclaimed; it was now decided that the supplies should be mainly placed in the Residency. The authorities maintained a bold front; but the news of mutiny came in from every side—Bareilly on 31st May, Sitapur on the 3rd of June, Cawnpore on the 4th, and Fyzabad on the 6th—and on the 11th of June the cavalry of the police mutinied, and the infantry followed their example. Large bodies of mutineers now began to gather round Lucknow. These finally concentrated at Chinhat, a village lying 7 m. from Lucknow, on the Sitapur road, across the Kokrail nulla, and were attacked at Ismailganj, 1½ m. W. of this, by Sir Henry Lawrence on the 30th June with a small force of ten guns, 100 cavalry, and 550 infantry, of whom only 300 were British. Unfortunately the troops started later than had been intended, and, by some sad blundering, without having received any food, and in the end the overpowering heat prevented them from making a determined attack on the rebels, who were strongly posted and fought with great confidence; and finally the little force had to retreat with a loss of over 100 British soldiers. The enemy at once followed up their success, and the siege of the Lucknow Residency, begun the next day, 1st July, was partially relieved by General Havelock on 25th September, and was finally relieved by Sir Colin Campbell on 17th November. At the commencement there were about 900

British troops and officers in the position, 150 volunteers and 700 Indian troops, 600 women and children and 700 non-combatant Indians—in all about 3000 souls. At the time of the relief in September there were less than 1000. On the night of the 1st July the Machhi Bhawan garrison fell back to the Residency, blowing up the magazine and destroying the guns there as far as was possible. On 2nd July Sir H. Lawrence was mortally wounded by a shell fired from the howitzer captured from us at Chinhath, and died two days afterwards. Major Banks succeeded him in chief civil authority, and Colonel Inglis in command of the troops.

The defences of the Residency, which stood some 30 ft. above the level of the ground round it, will be understood best by visiting the locality, and the following brief account. At the N.W. corner, running out above the depression in which the church and graveyard were situated, was Innes Garrison. In the centre of the N. face was the Redan, armed with two 18-pounders and a 9-pounder, which commanded the whole river-side and the opposite bank; on its W. side was Evans' Battery, with one 18-pounder and two 9-pounders. Just E. of the Redan was the Water Gate, beyond which a defence of fascines and sandbags ran to the Hospital, formerly the Banqueting Hall; the Water Gate had a battery of three guns, with Alexander's Battery on its right, and the Hospital one of three mortars. The Residency lay in the centre of the position S. of the Redan and W. of the Banqueting Hall. With its lofty rooms, fine verandas, and large porticoes, its range of subterranean apartments, its ground floor and two upper storeys, it afforded accommodation to nearly 1000 persons—men, women, and children. The Baillie Guard, situated on the lower ground

below the Hospital, was partly used as a store-room, partly as the treasury and office, and partly as barracks for the sepoy, who garrisoned it under Lieutenant Aitken. In the Southern angle of the guard was a concave-shaped guard-house, removed after 1857. On the S. side of the road, leading up through the Baillie Gate to the centre of the Residency, was the house of Dr Fayrer, with a garrison commanded by Captain Weston and Dr Fayrer. The Post Office was a very important position, commanding the jail and mosque to the right, and the Clock Tower and offices of the Tehri Kothi to the left outside the entrenchment, and was armed with three guns. It was also the headquarters of the Artillery and the Engineers. In front of it, on the part of the E. face projecting beyond the line of the Baillie Guard, were the Financial Garrison, Sago's Post (so called from the owner of the house here being a schoolmistress of that name), and the Judicial, or Germon's, Garrison. The first was commanded by Captain Sanders, of the 13th. It was a large two-storeyed house, and well barricaded. Between the Post Office and the Residency was the Begam Kothi, nearly in the centre of all the defences, where a double range of out-offices formed a square within a square. At the S.E. corner of the defences were Anderson's Garrison and the Cawnpore Battery, mounting an 18-pounder and two 9-pounders; these were the two most dangerous posts of all, being specially exposed to the fire of Phillips' Garden Battery. W. of these were Duprat's Post, held by a brave Frenchman, and behind it the Martinière Post; in front, outside, at a distance of only 30 yds., was Johannes' house. The Brigade Mess, the Sikh Square,¹ with a

¹ Four mines of the enemy were exploded between Duprat's Post and the S.W. corner of the Sikh Square.

24-pounder howitzer commanding the street, and the First and Second Squares filled up the rest of the S. side to the point where Grant's Post, Gubbins' Battery, with a 9-pounder, and Gubbins' Garrison defended the S.W. angle, which lay farther N. than the first mentioned. Between Gubbins' Garrison and the Begam Kothi, and S. of the Residency lawn, was Ommanney's Garrison; while W. of the Residency were the Slaughter House and Sheep House Posts, the latter immediately S. of the church depression. All these posts are marked on the ground by memorial pillars, which enable the outline of the whole defences to be fully understood. As at present situated the Residency appears a strong position to hold; but it will be seen from the model of it as it stood in 1857, contained in a room of the Tai-khana (the original is in the Museum), that it was then commanded by so large a number of buildings close to it that it seems a marvel that any one in it should have escaped death from the bullets of the enemy.

On the 2nd of July, the day of Sir Henry's being wounded, the rebels attacked the Baillie Guard Gate. At first the deaths averaged from fifteen to twenty daily, many being killed by an African, who fired from Johannes' house without ever missing. On the 8th Captain Mansfield and three other officers and Maycock, a civilian, sallied out, spiked a gun, and killed about forty of the rebels without losing a man, though three were wounded. On the 9th another sortie was made, when a private named O'Keene spiked a gun. On the 10th, the ammunition of the rebels' cannon falling short, they began to fire pieces of wood, copper coin, iron, and even bullocks' horns. Fortunately the old State guns had been collected by the care of Sir Henry Lawrence on the low ground under the

Redan, and luckily for us there was no arsenal in Lucknow from which the mutineers could obtain unlimited quantities of gun ammunition. Had that been the case, the Residency would have been rendered untenable in a very short time. On the 14th the enemy made a general attack. On the 16th they made a night attack on Gubbins' Battery, but were beaten back. On the 20th of July they exploded a mine near the Redan, attempted to storm the Baillie Guard, and made their first general assault at every point, pouring in volleys of musketry, and sending shell after shell into the entrenchments. The mine did no harm to the Redan Battery, but the enemy, supposing a breach to have been made, rushed up the glacis at the double with fixed bayonets.¹ Hundreds were shot down; but their leader, waving his sword, on which he placed his cap, shouted to them to come on. Again they advanced, but the grape made huge gaps in their ranks, a musket ball killed their leader, and they then retreated, leaving heaps of slain and wounded. At the same time a furious attack was made on Innes' outpost, where Lieutenant Loughnan, of the 13th Indian Infantry, with 24 English soldiers, 12 civilians, and 25 sepoy, beat back

1 "What have they done? where is it? out yonder—guard the Redan! Storm at the Water Gate! storm at the Baillie Gate! storm, and it ran Surging and swaying all round us, as ocean on every side Plunges and heaves at a bank that is daily drowned by the tide—So many thousands that if they were bold enough who shall escape? Kill or be killed, live or die, they shall know we are soldiers and men! Ready, take aim at their leaders—their masses are gapped with our grape—Backward they reel like the wave, like the wave flinging forward again. Flying and foil'd at the last by the hand—ful they could not subdue—And ever upon the topmost roof the Banner of England blew."

—LORD TENNYSON.

the whole host of rebels, who at last slowly retreated, carrying off 100 of their wounded comrades. At the Financial and Sago's Posts a column of rebels with a green standard was, after some hours' hard fighting, beaten off, with the loss of all their commanders and about 60 men. The fight ended at 4 P.M.

Though beaten at all points, on the 20th the enemy maintained a furious cannonade, and planted new batteries. On 21st July Major Banks was shot, and owing to their fire the windows of the houses within the Residency had to be barricaded, and even then inmates were shot inside them. One great torment was the flies, which swarmed in incredible numbers, the ground being black with them. On the 25th July a letter was received from the Quarter-master-General of General Have-lock's force bidding the besieged to be of good cheer, as a large relieving force was coming. But days passed and the rebels were busy with their mines, and but for the countermining by Captain Fulton, of the Engineers, the place must have fallen.

On the 10th of August there was a second general attack, but the enemy showed little courage, and they were easily beaten off. On the same day a mine was exploded at Sago's Garrison, which blew down some outhouses, and blew up two English soldiers into the air, who, however, were not killed. Another mine between the Brigade Mess and the Cawnpore Battery blew down a stockade, and the enemy attempted to enter, but were repulsed. The 8-in. howitzer which the rebels took at Chinhat played on Innes' Post with great effect, bringing down beam after beam, and making many breaches. On the 11th of August Major Anderson, the Chief Engineer, died. On the 14th Captain Fulton exploded a mine under a house near Sago's Garrison, killing 50 to

60 of the enemy. On the 18th the second Sikh Square, garrisoned by 15 Christian drummers and musicians and 15 Sikhs, was blown up by the rebels, and 7 Christians and 2 Sikhs were buried under its ruins. A large breach was made, and the enemy delivered their third home assault, which was the nearest of all to being successful, but their leader was killed, and they retired. Captain Fulton, with a number of volunteers, then sallied out, destroyed a number of houses, and blow up the shaft of another mine begun by the rebels.

On the 20th August the house called Johannes' was blown up by Captain Fulton, and 60 to 80 of the rebels were killed. Captain Fulton then headed a sally, and after driving out the insurgents from several buildings, blew them up. Lieutenant Macabe, of the 32nd, headed another party, and spiked two guns. Previous to this Lieutenant Macabe had attacked Johannes' house and bayoneted a number of the enemy, who were found asleep, and amongst them the African who had picked off so many of the English during the first days of the siege, and had been christened by the soldiers "Bob the Nailer." On the 29th of August, Angad¹ the spy brought a letter from Cawnpore saying that the relief would take place in three weeks. On the 5th of September the rebels made their fourth and final attack, having previously exploded three mines. They advanced boldly to the Brigade Mess, but were driven back with the loss of 100 men. They then attacked the Baillie Guard and several other places, but were similarly repulsed. On the 14th Captain Fulton was killed at Gubbins' Battery by a 9-pound shot, which took his head com-

¹ He was still living in 1876, and was presented to King Edward VII., then Prince of Wales.

pletely off. On the 23rd of September a furious cannonade was heard outside the city, and confirmed the news received the day before that Generals Outram and Havelock were coming. On the 25th smoke and the crack of musketry showed that street fighting was going on. The fire advanced steadily towards the entrenchments, and the relievers finally entered them in the evening.

General Havelock, who had reached Cawnpore on the 17th July, and whose troops had destroyed the palace at Bithur on the 19th, crossed the Ganges, and advanced towards Lucknow on the 25th, with only 1200 men, and fought two actions with the enemy at Unao and Basiratganj on the 29th. In these actions he lost one-sixth of his force, and was compelled to fall back on Mangalwar. Advancing once more from there, he defeated the enemy again severely at Basiratganj on 4th August, but thereafter had no option but to retreat to Cawnpore; before doing so he beat the enemy a third time at Basiratganj. Three days after his return there he drove a new force of rebels out of Bithur on 16th August; but it was not till the 18th September that sufficient reinforcements arrived to enable him and General Outram (who had joined the force meanwhile, but chivalrously waived his command in favour of General Havelock) to cross the Ganges again with 3000 men. On the 21st he defeated the enemy again at Mangalwar, and on the 23rd at Alambagh, where the news of the capture of Delhi reached him. As the flooded state of the country across the Gumti made it impossible to move guns and so effect the relief of the Residency from the left bank, the forces moved forward for their final effort on 25th September by way of the Charbagh, in front of which sharp

fighting took place at the Yellow House.¹ Crossing the canal and leaving the 78th as a rear-guard on the bridge, the troops followed the line of the former to the old barracks of the 32nd, just to the N. of the E. end of Hazratganj, and from there passed on to the Sikandarbagh, and then followed the road past the Shah Najaf to the Moti Mahal, having encountered but little opposition up to the last point. Here they came under heavy fire from the Khurshid Manzil and from a battery at the corner of the Kaisarbagh, and were checked for the moment. But the rear-guard, which had not followed the main column but had turned up the Hazratganj, now came up and took the battery in the rear; and the united column pushed on to the Chhattar Manzil Palace still under heavy fire. At the corner of this palace was a square enclosure, afterwards known as the Dhooly Square, in which a short pause took place, while it was debated whether the troops should push on or not, and during this Brigadier-General Neill was shot through the head while seated on his charger in a gateway. The decision having been for an advance, the troops issued from the square and turned to their right towards the Residency. The Highlanders and Sikhs, who took the farther road to the Khas Bazar, suffered considerably; the rest of the force took the nearer road into the Painbagh, and, passing E. of the Jail, took a battery of the enemy in the rear with but little loss; and both columns, uniting once more by the Clock Tower, entered the Residency Gate and relieved

¹ It was here that Captain William Olpherts, R.A., greatly distinguished himself and won the Victoria Cross. When a man of the dauntless courage of Sir James Outram records of the deed by which the reward for exceptional valour was won, "Bravery is a poor and insignificant epithet to apply to a valour such as yours," that deed ought not to be forgotten by Englishmen.

the beleaguered garrison, though not without an unfortunate *contretemps*, which cost the lives of several brave Sikhs. The heavy guns and the wounded remained for the night at the Moti Mahal. When the latter were being brought in next day the dhooly-bearers were by a terrible mistake led into the square above mentioned instead of directly into the Chhattar Manzil, and were brought under a deadly fire of the enemy. Deserted by the bearers, the wounded were heroically defended by Surgeon Anthony Dickson Home and a few privates, who held one position after another with desperate resolution, and were finally rescued from the Residency after all hope of escape was lost: for this deed of valour the surgeon and three privates received the Victoria Cross.

This relief was not, however, effected without most serious loss; for though 2000 soldiers had got into the Residency, 550 officers and men were killed and wounded. Among these Brigadier-General Neill and Major Couper were killed, and ten other officers fell, besides those who died of their wounds. At this time the houses in the Residency were all perforated with cannon-shot, and the Cawnpore Battery was a mass of ruins; the outpost at Innes' House was roofless, and out of the Brigade Mess alone 435 cannonballs were taken. The besieged were not, however, free. Those who relieved them had possession of the Tehri Kothi and the Farhat Bakhsh Palace, as also the Chhattar Manzil Palace, from which and from the Clock Tower the enemy's fire had been most fatal. But though the garrison had extended their positions, the enemy were far from abandoning the city, and Generals Outram and Havelock, with their troops, were themselves blockaded. On the 26th of September a sortie was made, and the troops spiked two

mortars and blew up a powder magazine. Captain Lowe brought in as trophies an 18-pounder, a 9-pounder, and five smaller guns. After this the garrison frequently took the offensive, and captured several positions. Attempts were then made to open communications with the Alambagh, where the relieving force had left their baggage and ammunition, with 4 guns and 300 men to defend these. The attempt failed, for an intervening mosque, filled with riflemen, was too strongly fortified to be taken without very great loss. The besieged now repaired their defences, and extended them near Innes' Post by taking and fortifying a mound, which became one of their strongest positions. Desultory fighting went on incessantly, and the palaces which had been taken by our troops continued to be the object of severe attacks. Provisions, also, again became scarce. On the 10th of November Sir Colin Campbell¹ reached the Alambagh, and relieved the garrison besieged there. His force consisted of 4500 men, with which he had to meet 30,000 to 40,000 trained rebels, and as many more irregular volunteers. It was at this time that James Kavanagh, an uncovenanted officer who had distinguished himself in several sorties, offered to carry despatches from Sir James Outram at Lucknow to Sir Colin Campbell at the Alambagh, and owing to his courage and address succeeded in conveying them through the lines of the enemy, a feat for which he received the Victoria Cross. After a reconnaissance towards the Charbagh to deceive the enemy, Sir

¹ Sir Colin Campbell, then in his sixty-fifth year, left England on 11th July, and reached Calcutta on 13th August. There he was detained forwarding troops and making arrangements till 27th October. On 1st November he reached Allahabad, and on 3rd November arrived at Cawnpore, and on 9th November left that place to join the force already well on the road to Lucknow.

Colin left his baggage in the Alam-bagh and proceeded to the Dilkusha, in which movement his advanced guard encountered a heavy fire, and drove the rebels past the Martinière College. On the 12th an attack of the rebels was repulsed; on the 14th the rear-guard joined; and on the 16th the whole force, except the 8th Regiment, left to guard the Dilkusha, advanced against the Sikandarbagh. After a fierce conflict the 4th Panjab Rifles, the 93rd Highlanders, and the 52nd, broke into the enclosure, and next day 2000 dead bodies of the rebels told the result. While this fight was raging the English suffered much from a murderous fire directed upon them from the Shah Najaf Tomb. This place was next attacked by Peel's Naval Brigade and the 93rd, and finally was fortunately taken, the enemy abandoning it at the last moment. The troops then rested for the night, throughout which they were fired on continually from the adjacent buildings. On the 17th the Khurshid Manzil—which had been used by Her Majesty's 32nd as a mess-house—a large, two-storeyed, flat-roofed house, flanked by two square turrets, was stormed. In the afternoon Generals Outram and Havelock, who had occupied the Hiran Khana outside the Chhattar Manzil, crossed by the Moti Mahal to the mess-house, and met Sir Colin Campbell there, and the relief of Lucknow was finally effected. The British loss was 540 killed and wounded, of whom 10 officers were killed and 35 wounded. That evening Sir Colin decided that the garrison, as well as the sick and wounded, women and children, should be withdrawn from the Residency to the Dilkusha, the enemy being deluded, meanwhile, by the capture of Banks' House and a heavy bombardment of the Kaisarbagh. This was carried out on the 22nd,

the enemy continuing firing into the old positions long after they had been abandoned. On the 24th of November General Havelock died at the Dilkusha, and was buried next day in the Alam-bagh, to which the whole force fell back. On the 27th the convoy of the sick and women and children started for Cawnpore, General Outram being left at the Alam-bagh with a force finally made up to 3500 men and 25 guns.

Sir Colin returned in March 1858, before which time six attacks had been made on the British position (which lay across the road to Cawnpore slightly in the rear of the Alam-bagh), and had been beaten off. The forces under him for the recapture of Lucknow consisted of 17 regiments of infantry, 28 squadrons of cavalry, and 134 guns—in all 2000 men—and the supporting Nepal army, under Sir Jang Bahadur and General Franks, of 6000 men, while the numbers of the enemy were 100,000, and the guns planted on their triple line of defence 100. On the 2nd of March the army moved from the Alam-bagh to the Dilkusha, and on the 6th a force under General Outram crossed the Gumti to operate against the enemy from the left bank. This completely turned the first line of defence along the canal of Ghazi-ud-din Haidar Khan, and it was abandoned by the mutineers without a struggle on the 10th. Captain Butler, who swam across the Gumti to inform the force on the right bank of its abandonment, received the Victoria Cross for this feat of daring. No opposition was offered either at the Sikandarbagh or Shah Najaf, which were occupied next day. On the former date the advance on the enemy's right was also commenced by the seizure of Banks' House, which was followed up on the 11th by the capture of the Begam Kothi, by the 93rd and 4th Panjab Rifles, where 800 of the

enemy were killed, and where Major Hodson was shot. On the 14th the Hazratganj Imambara, up to which a way had been sapped through the houses, was seized, and the right of the enemy's second line of defence, which ran from here past the Tarawali Kothi and Khurshid Manzil to the river E. of the Moti Mahal, was thus turned. Nor was this all, for a party of the Highlanders and the 10th Regiment, boldly pushing on, established itself in a palace commanding the Kaisarbagh enclosure, round which the last line of defence had been drawn, and being at once supported by Generals Franks and Napier, after desperate fighting inside and outside, the enemy abandoned this, and fell back into the city. On the 16th General Outram, who had been kept back by the Commander-in-Chief, crossed the Gumti and occupied the Residency and the Machhi Bhawan, and on the next day the Husainabad Imambara. Arrangements were then made to drive out and corner the enemy completely, the intention being to intercept the rebels at the Musabagh. This failed of execution through the immobility of some of the commanding officers concerned, and the rebels streamed away to maintain the struggle in Oudh and Rohilkhand for another year.

(a) The Residency and the quarters E. and S.E. of it connected with the Relief of Lucknow.

The Residency is the spot which all Englishmen will wish to visit first in Lucknow. It is entered on the E. side by Neill's Road which runs under the Baillie Gate and passes upwards between the Banqueting Hall on the right and Dr Fayer's house on the left. The gate was banked up with earth inside during the siege, and Generals Havelock and Outram entered through an opening to

the left of it. When the evacuation of the Residency on 22nd November 1857 was carried out the doors of the gate were closed by Colonel Inglis as soon as Sir James Outram had passed through them. The gardens are beautifully arranged and perfectly kept, and the place is now one full of the peacefulness which properly belongs to sad scenes long since enacted, in the midst of which one can think, thankfully and proudly, of the events and deeds of that summer of 1857.

"Ever the labour of fifty that had to be done
by five,
Ever the marvel among us that one should
be left alive,
Ever the day with its traitorous death from
its loopholes around,
Ever the night with its coffinless corpse
to be laid in the ground,
Heat like the mouth of a Hell, or a deluge
of cataract skies,
Stench of old offal decaying, and infinite
torment of flies."

In front of the Baillie Guard is a memorial erected by Lord Northbrook to the faithful native soldiers who shared the defence with the British. The foundation-stone of it was laid by King Edward VII., then Prince of Wales, on 7th January 1876.

"Praise to our Indian brothers, and let the
dark face have his due,
Thanks to the kindly dark faces who
fought with us faithful and true,
Fought with the bravest among us, and
drove them and smote them and slew,
That ever upon the topmost roof our banner
in India blew."

On the lawn in the centre of the Residency is a fine marble runic cross inscribed:—

In memory of
MAJOR-GEN. SIR HENRY LAWRENCE,
K.C.B.,
And the brave men who fell
In defence of the Residency,
1857.

and near it is another memorial of the 32nd Regiment.

The 68-pounder guns in the Residency belonged to the force which captured Lucknow in 1858.

and not to the second relieving force in 1857.

The Residency Building is almost a complete ruin, though a very beautiful one; but it is still possible to ascend the staircase of one of the towers, where throughout the siege the Banner of England floated.

"Banner of England! not for a season,
O Banner of Britain! hast thou
Floated in conquering battle or flapt to
the battle-cry;
Never with mightier glory than when we
raised thee on high,
Flying at top of the roofs in the ghastly
siege of Lucknow—
Shot through the staff or the halyard, but
ever we raised thee anew,
And ever upon the topmost roof our
Banner of England blew!"

A tablet in Dr Fayrer's house indicates the room in which Sir Henry Lawrence died on 4th July.

"Never surrender, I charge you, but every
man die at his post!
Voice of the dead whom we loved, our
Lawrence, the best of the brave:
Cold were his brows when we kissed him
—we laid him that night in his grave."

The house was occupied on the first relief by Sir James Outram and his staff—as Mr Ommanney's house was occupied by Sir Henry Havelock. The subterranean rooms, or "taikhanas," here and at the Residency and the Begam Kothi, in which most of the women and children were protected, will be found specially interesting. In a room of the Begam Kothi, so called for having been the residence of a European wife of a King of Oudh, and distinguished by its pretty mosque, is the model of the Residency in 1857, which should be viewed before the round is made of it as described on p. 389. In the Brigade Mess buildings were the rooms which Lady Inglis and Lady Couper occupied. Every spot in the Residency is interesting, but the most interesting, if the saddest of all, is the cemetery round the ruined church, in which

Sir Henry Lawrence, Brigadier-General Neill, and so many brave men and women and hapless children, to the number of nearly 2000, sleep their last sleep. General Neill's grave is on the S. side of Sir Henry Lawrence's, which is enclosed by an iron railing, and bears the well-known inscription:—

Here lies
HENRY LAWRENCE,
who tried to do his duty.
May the Lord have mercy on his soul!
Born 28th of June 1806.
Died 4th of July 1857.

Readers of Mr Bosworth Smith's *Life of Lord Lawrence* will be able to picture for themselves the scene of that Viceroy standing in deep thought over his brother's grave after viewing the procession of the Talukdars of Oudh in front of the Residency.

Leaving the Residency enclosure, most persons will probably wish next to visit the buildings and sites to the E. of it connected with the reliefs by Sir Henry Havelock and Sir Colin Campbell. 150 yds. in front of the Baillie Gate, at the intersection of the roads, are still to be seen the foundations of the Clock Tower, from which the enemy kept up a constant fire on the E. of the Residency. Farther on, to the right of the road, was the Jail, where the Court of the District Judge now is, while standing at a greater distance back on the left were the Tehri Kothi, now the residence of the Judicial Commissioner of Oudh, and the Farhat Bakhsh ("Delight-giving") Palace. The last designation originally included not only the above buildings, but also those of the Chhattar Manzil Palace beyond, which constituted the ladies' apartments so long as the Farhat Bakhsh was the principal residence of the Oudh Kings—from S'aadat 'Ali Khan down to Wajid 'Ali Shah. S.E. of the Jail was the Painbagh, E. of which pro-

jected the S. portion of the Chhattar Manzil enclosure, containing the small Chhattar Manzil, the Kasr-i-Sultan, or the Lal Barahdari now the Public Library, and the Darshan Vilas. It must be remembered that in 1857-8 these buildings did not stand separate and in the open, as they are now seen, but were all enclosed and divided off by high walls of great strength. Both the Chhattar Manzils are surmounted by an umbrella (*chhattar* or *chhattvi*), whence their name. The larger, on the bank of the river, is used now as a club. After the relief of the 25th September 1857, the British position was extended from the Residency eastwards as far as the Chhattar Manzil. Near this, opposite the Kaisarbagh, is the marble memorial statue of the Queen-Empress Victoria under a canopy. The Kasr-i-Sultan was the throne-room in which the widow of Nasir-ud-din Haidar attempted to compel the Resident, Colonel Low, to place her son, born before the King married her, on the "masnad." A little beyond these buildings is the Telegraph Office, and N. of it the Sher Darwaza gateway of the Dhooly Square, where General Neill was shot on 25th September 1857. E again, and opposite the N.E. corner of the Kaisarbagh, was the Hira Khana, or Deer House, between which and the river and the road to the modern Bruce Bridge were the engine-house, stables, and sergeant's house, all of which played a part in the reliefs. Neill Road, which has been followed to the Sher Darwaza, now continues past the N. front of the Kaisarbagh and the Memorial near the N.E. corner of this, and joins the Hazratganj, while Clyde Road, taking off from the Strand Road, which runs between the river and the Farhat Bakhsh and Chhattar Manzil, passes under the road to the river, and continues along the line of the buildings famous in connection

with the reliefs. The fine stone mausolea in the Kaisarbagh were constructed by S'aadat 'Ali Khan and his son; and the palace was built by Wajid 'Ali Shah with the utmost extravagance and in the vilest of taste. It was from the fire from the defences of the palace and the roofs of the tombs that our troops suffered so much in finally reaching the Residency, both in September and in November 1857. The palace originally had one great gate at the S.E. corner and two others on the N. and S. sides, and its interior was divided into courts, and filled with confused masses of buildings, among which were the Chandiwalli Barahdari, paved with silver, and the Badshah Manzil. In the centre of the Kaisarbagh stands the Provincial Museum (formerly the Canning College), of which the archæological section is the most important. The large hall contains sculptures, the majority from Mathura (Muttra), which are partly Buddhist and partly Jain. The adjoining room is reserved for Brahmanical sculptures from different parts of the Province. A special room has been set apart for the antiquities excavated on the site of Saheth-Maheth, the ancient city of Srāvasti, and the famous convent of the Jetavana. The various objects from Kasia (believed to be the ancient Kusinagara, where the Buddha entered Nirvāna) are also exhibited separately. The epigraphical section contains numerous Sanskrit inscriptions both on stone slabs and on copper plates. The important coin collection is only shown to visitors on application to the Curator. The Museum contains also a zoological section, which includes a good collection of stuffed birds. An illustrated catalogue of the archæological section is desirable for reference. The buildings round the enclosure, among which were the Chaulakhi and the Kaisar Pasand, have been made over to

the Talukdars of Oudh. Much of the concealed jewellery of the ex-King was taken from the Kaisarbagh to the Residency in May 1857, and was largely stolen there. The Memorial on the E. side marks the spot where two small parties of European refugees from Sitapur were shot on 24th September and 16th November.

Proceeding now by Clyde Road, the first building seen on the left is the **Moti Mahal**, with Martin's House between it and the bridge. It lies on the left side on the bank of the Gumti, and comprised, beside the structure once domed, and which gave its name to the whole, the Mubarak Manzil and the Shah Manzil, from which the King used to watch the fights between wild animals on the farther side of the river. It was here that General Havelock's rear-guard remained on 25th September, and Sir Colin Campbell's force came into actual touch with the besieged on 17th November. To the right side of the road, standing on a high site, the base of which is still surrounded by defensive works, is the **Khurshid ("Sun") Manzil**, used in 1857 as the Mess-house of the 32nd, and since occupied by the Girls' Martin-ière School. S. of it again is the **Tarawali Kothi**, or Observatory, now the Bank of Bengal. On the occasion of the relief of November 1857 the former was strongly held by the enemy, and barred the way of the relieving force for some time, but, after being subjected to a heavy bombardment by the Naval Brigade and Mortar Battery for three hours, was taken by the 53rd and 90th, and formed the place of meeting of Generals Outram and Havelock with Sir Colin Campbell. In March 1858 the enemy's second line of defence ran from the river at the **Moti Mahal**, past the **Khurshid Manzil** and **Tarawali Kothi**, to the **Hazratganj Imambara**. 500 yds.

E. of the **Moti Mahal** and **Khurshid Manzil** stand the **Shah Najaf** and **Kadam Rasul**, and nearly 1000 yds. on again lies the **Sikandarbagh**, round which such desperate fighting took place in November 1857. **Shah Najaf** is the tomb of **Ghazi-ud-din Haidar Khan**, surmounted by a dome, and surrounded by walls of such immense thickness that neither the heavy guns of the Naval Brigade nor those of Captain Middleton's battery, brought quite close up, were able to make any impression on them, and the advance was severely checked here until some soldiers of the 93rd managed to scramble up a broken part of the wall at the back, and found that the enemy had just fled to avoid being caught like their comrades in the **Sikandarbagh**. Some of the defenders made use of bows and arrows—for the last time, probably, in Indian warfare. Sergeant Paton received the Victoria Cross for the part he took in this escalade. An English midddy, **Martin Abbott Daniel**, was killed serving his gun outside **Shah Najaf**. The decorations and contents of the interior, though tawdry, are curious; one picture represents a cock-fight, at which the King of Oudh and General **Claude Martin** are present.

The **Kadam Rasul** is now a ruined building of red brick, the relic which it was built to cover in 1830 having disappeared in 1857; it is approached by a path through the garden to the E. of **Shah Najaf**, and has a fine view. The picturesque **Horticultural Gardens** now lie between these buildings and the **Sikandarbagh**, through which the road to the bridge across the river near this point leads. The gateway of the garden, which is 120 yds. square, still stands; in front of it was a sarai, which was easily captured by the troops on 16th November

1857, but a breach¹ in the thick wall of the Sikandarbagh was made only with great difficulty, and was carried by the 93rd, 53rd, and the Sikhs of the 4th P.I. "Never was a bolder feat of arms," wrote Sir Colin Campbell of it. The 93rd lost 90 killed and 99 wounded; the dead were buried in a trench, still marked by a mound to the E. of the gate. None of these three posts were held by the enemy in September 1857, and all of them were abandoned with the first line of defence in March 1858. From this point the lines of the two reliefs and the capture diverge, Sir Colin Campbell's two advances having been made from the Martinière and Dilkusha, to the S.E. of the Wingfield Park, while Generals Havelock and Outram pushed up to the Sikandarbagh from the S., along what is now known as Outram Road, which passes N. of the Wingfield Park and S. of the King's Chaupar, or Cross Stables (now Lawrence Terrace), to close to Government House, formerly Banks' House, and originally the Hayat Bakhsh ("life-giving") Kothi, where it joins Havelock Road, which marks up to the Charbagh the route along the canal followed by the troops in their advance from the latter place on 25th September 1857. The King's Stables had been used as barracks for the 32nd Regiment before the Mutiny.

At the N.W. corner, outside Government House, is *Christ Church*. It is a neat building with a tower. The church compound is prettily laid out with many flowers and creepers. There

are a number of interesting tablets on the walls. Those in memory of Sir James Outram and Sir H. Lawrence deserve particular attention.

Wingfield Park is well laid out, and is adorned with many white marble pavilions and statues, and has a large pavilion in the centre, surrounded by 80 acres of grounds and flower-gardens. It is named after Sir C. Wingfield, Chief Commissioner of Oudh (1859-66)

Hazratganj, which leads to the N. from Government House, was the route of the rear-guard in September 1857, when, after holding the Charbagh Bridge for several hours, it marched to join the main column in advance of it. A few hundred yds. up it on the left side the Post Office occupies the building of the Sultan Inaiyat, a portion of the **Begam Kothi** property—once the residence of a Queen of Amjad Ali Shah—taken with much slaughter of the enemy on 11th March 1858; and nearly $\frac{1}{2}$ m. farther is the **Hazratganj Makbara**, as it is usually called, the tomb of Amjad Ali Shah, which was captured on 14th March—a feat which led to the occupation of the whole of the enemy's lines of defence at Lucknow. The interior, which once contained the most sumptuous fittings, is now neglected and dirty; but the garden court in front is rather pretty. Beyond the Imambara is the high-standing **Nur Bakhsh¹ Kothi**, now the official residence of the Deputy-Commissioner of Lucknow; and a little farther N. the S.E. corner of the Kaisarbagh and the Memorial in front of it are reached.

(b) **The Quarters S. of the Railway connected with the Reliefs.**

The scene of the operations of the relieving forces before Luck-

¹ According to Sergeant Forbes Mitchell, the breach in the wall of the garden, which was wide enough to admit three men abreast, was made at the spot where the road to the river now passes through it, and the 53rd got into the enclosure through a window to the right of the gate. Private Dunlay of the 93rd received the Victoria Cross as the first man who penetrated into the garden and survived the desperate conflict in it.

¹ "Light-giving."

now may now be completed by reference to the Martinière, the Dilkusha, and the Alambagh, the original base of each one of the reliefs. A pretty road, striking off to the left from the main road past the W. side of the Wingfield Park, leads through the Martinière Park to the buildings in it. Not very far from these will be seen two small grave enclosures, and in one of these will be found the grave of Major Hodson of Hodson's Horse, killed on 14th March 1858.

The Martinière is an irregular building, in a sort of debased Italian style. The basement storey is raised to a good height above the ground, and has extensive wings, but the superstructure is bizarre, and has been styled "a whimsical pile," though there is something striking in its great central tower. It was built by Major-General Claude Martin (1735-1800), whose tomb, restored in 1865, is in the E. crypt of the chapel; the plain sarcophagus was once guarded by a marble grenadier, with arms reversed, at each angle. To the E. of the college is a fine lake with a fluted masonry column in the centre.

General Martin was the son of a cooper, or a silk manufacturer, at Lyons, and served as a soldier under Lally in the regiment of Lorraine. He and some of his comrades formed a company of Chasseurs under Law, and garrisoned Chandernagore till taken by Clive. He then entered the British army, and rose to the rank of captain. In 1776 he entered the service of the Nawabs of Oudh, but the British Government allowed him to retain his rank and to enjoy promotion. In 1783 he formed the acquaintance of De Boigne, and took part with him in cultivating indigo and lending money to the Nawab, by which he acquired a large fortune. It is said that Asaf-ud-daula offered him £1,000,000 sterling for the

Martinière, but the Nawab died before the bargain was completed, and General Martin himself, dying at the Farhat Bakhsh before the building was finished, directed it should be completed out of the funds left to endow a school in it. This school is now one of the best in all India for the education of children of European descent, whose parents are permanent residents in the country, or who hold subordinate positions in the Government service. The advance on the Martinière in November 1857 met with strong resistance by the rebels. It was held by them again in March 1858, and it was in the attack then made on it that Sir William Peel was wounded by a musket-ball.

The Dilkusha, or "Heart-expanding," was a villa built by S'aadat 'Ali Khan in the midst of an extensive deer-park. It stands about $\frac{3}{4}$ m. to the S. of the Martinière across the railway, and is now a ruin, but a very picturesque one. It was captured on the 12th of November 1857 by Sir Colin Campbell, and here twelve days later General Havelock expired, with the knowledge that the whole garrison of Lucknow had been safely rescued from the Residency. On the occasion of Sir Colin Campbell's second advance it was occupied on the 2nd March.

$\frac{3}{4}$ m. to the S.W. from the Dilkusha, at the other side of the present Cantonments, and about $1\frac{1}{2}$ m. from the Charbagh and railway station, is the Alambagh, with the grave and memorial of General Havelock. It was first taken by that General on 23rd September 1857, was occupied by a detachment left behind with the baggage and wounded till the arrival of Sir Colin Campbell on 12th November, and was guarded by Sir James Outram and his force of 4500 from 27th November 1857 till March 1858. It is a walled enclosure 500 yds. sq. and was

built by Wajid 'Ali as an occasional residence for a favourite wife. General Havelock's tomb is surmounted by an obelisk 30 ft. high, with an inscription recording his death on the 24th of November 1857.

(c) **Quarters N.W. of the Residency and across the Gumti.**

Five hundred yards to the N.W. of the Residency is the Iron Bridge, across which our troops passed to the fight of Chinhat, and again retreated from it, and over which General Outram passed on 16th March 1858. It was designed by Rennie, and sent out from England at the end of the 18th century, but was not erected till 1840-4. From it there is a beautiful view of the Farhat-Bakhsh-Chhattar-Manzil Palace.

Across the bridge to the right is the Badshahbagh, from which the enemy kept up a severe fire on the Residency, and from which the shell which caused the death of Sir Henry Lawrence came. It was taken by Sir James Outram on 8th March 1858. It was given to the Raja of Kapurthala in 1858, and was purchased from him for the new Canning College, built at a cost of 5½ lakhs, of which 1½ were given by the Maharaja of Balrampur. Farther on, at Hasanganj, another road turns to the right and leads to the Kokrail Bridge and (3 m.) Ismailganj, 1½ m. in front of Chinhat (6½ m.), while the main road passes on to the old Cantonment (2½ m.) of Mariāon, passing the Karbala where Nasir-ud-din (died 1837) is buried; nothing is now left of the Cantonment except the ruined walls of a few houses. 1200 yds. W. of the Residency is the great Imambara, which stood inside the Machhi¹ Bhawan enclosure. The fort was dismantled in 1865, and nothing

now remains of it except the high site to the E. of the Imambara. It once extended 800 yds. along the road and 500 yds. to the S. of it, while the N.W. end reached almost to the river bank above the stone bridge which crossed the Gumti opposite the centre of it. At the back of it is the new Medical College and Hospital, the memorial of the Queen-Empress, of which the foundation-stone was laid by King George V., as Prince of Wales, on 26th December 1905. The cost of the whole building was to be 33 lakhs, and to include a hospital with 230 beds, a hostel for 200 students, a nurses' home, cottage wards, etc. Near the bridge is the so-called Mosque of Aurangzeb, built on the Lakshman Tilla or Mound, which is believed to have been the centre of the original settlement of Lucknow, and to have given the present name of the city. Between the enclosure and the N. side of the city, with the Chauk Bazar, is the modern Victoria Park: it contains a bronze statue of H.M. Queen Victoria. The Imambara court is entered by a fine gateway on the left of the road; though the details will not bear inspection, the great courtyard, with a lofty mosque and two minarets on the W. side, and the immense structure of the Imambara at the head of steps on the S. side, is decidedly fine. It was built in 1784, partly to afford relief in the terrible famine of that time which swept over all N. India, by Asaf-udaula, who is buried in it. The great hall is 163 ft. long, 53 ft. broad, and 49 ft. high, and is one of the largest vaulted galleries in the world.¹ It has a number of tawdry fittings in it, which have taken the place of the splendid articles described by Bishop Heber. European gentlemen are requested to remove their hats in the hall. At the end of the roadway passing in front of the Imambara is the Rumi Darwaza, or

¹ See p. 237.

¹ Fergusson's *East. Arch.*, 2, 328-329.

Turkish Gate, built, probably, on the analogy of the Sublime Porte, though not in the least resembling that; it is much disfigured by absurd decoration. 1000 yds. again beyond this gate is the Husainabad Imambara, and opposite it, on the N. side of the road, a beautiful garden, with the Husainabad Clock Tower and Tank and the Satkanda, or seven-storeyed tower. The first was built by Muhammad 'Ali Shah, 1837 A.D., as a burial-place for himself, and consists of two large enclosures, one of which is at right angles to the other. It is small in comparison with that in the Machhi Bhawan, and stands in a large quadrangle, which has a marble reservoir of water in the centre. The Imambara Hall is filled with mirrors and chandeliers, and contains the throne of the King, covered with beaten silver, and his wife's divan, with solid silver supports. The seven-storeyed watch-tower, of which only four storeys were built, was commenced by Muhammad 'Ali Shah, but interrupted by his death.

The tank is an extremely fine and picturesque work. On the N. side of it is a fine Barahdari, now the offices of the Husainabad Trust, with portraits of most of the Kings of Oudh; and behind that was the Daulat Khana. The Clock Tower, to the W. of the tank, was built in 1881, and is 220 ft. high. Farther again to the W. rises the Jami Masjid, begun by Muhammad 'Ali Shah, and perhaps the most satisfactory specimen of Oriental architecture in Lucknow. It has three domes and two minarets, and stands on a high platform, approached by flights of steps. Rather more than 2 m. N.W. of the Husainabad and beyond the waterworks pumping station on the Gumti, is the Musabagh, which is deserving of a visit, though the last $\frac{3}{4}$ m. to it must be accomplished on foot,

on account of the magnificent brick walls which surround it. It was here that the first mutiny at Lucknow took place on 3rd May 1857, and it was here that our troops failed to intercept the mutineers when finally driven out of Lucknow on 19th March 1858. The Nadan Mahal and tomb of Ibrahim Chishti, which lie in Yahiaganj, in the heart of the city on the Nadan Mahal Road, are well worth a visit. The former is the tomb of Sheikh Abdur Rahim Khan, already mentioned. The building dates from about the year 1600 A.D., and is a good specimen of early Mughal architecture. The whole building, from the plinth to the parapet, was originally of Agra red sandstone, some of which has, unfortunately, been stripped off. Its brackets are richly carved, and above the *chajja*, or projecting slab cornice, are traces of blue and yellow tilework. The dome was also covered with tiles, which have almost entirely vanished. Within are two marble sarcophagi, both bearing the *kalamdan*, or "pen-box," thus disproving local tradition, which assigns the less elaborate tomb to the Sheikh's principal wife. In the centre is a headstone elaborately carved with inscriptions from the Koran.

A few yards to the E. of the Nadan Mahal is a pleasing little red sandstone pavilion, containing five tombs, the two nearest the Nadan Mahal being of marble. Local tradition affirms that they are the tombs of the two other wives of the Sheikh, who are buried here, but one of them bears the *kalamdan*, again disproving the local tradition.

The tomb of Ibrahim Chishti, the father of Sheikh Abdur Rahim Khan, lies still farther Eastward, now open to the Nadan Mahal Road. It is composed of *kankar* blocks, and was originally plastered and painted. An inscription over the S. door gives the

date of the death of Ibrahim Chishti as 1543 A.D.

These monuments are in happy contrast to the debased buildings that represent the taste in architecture shown by the Oudh sovereigns. The Nadan Mahal is built in what might be called the best Hindu-Mughal style, and would merit careful attention even at Agra or Delhi. The squalid purloins that till recently surrounded these buildings have now been removed and a garden has been laid out around them, which forms a pleasant and shady retreat in this quarter of the city.

ROUTE 22.

DELHI to ALLAHABAD by Ghaziabad, Aligarh, Hathras Junction, Tundla Junction, Etawa, and Cawnpore, and Cawnpore to Lucknow.

From Delhi (12 m.) Ghaziabad junction station (see p. 293).

78 m. ALIGARH junction station (R., D.B., between the Civil Station and the city). A line from here runs N.E. to (61 m.) Chandausi and to (101 m.) Bareilly, on the Oudh and Rohilkhand main line. Aligarh is 825 m. from Calcutta, 904 m. from Bombay; by road 81 m. to Meerut, 45 m. to Etah, 46 m. to Muttra (*via* Hathras), 35 m. to Anupshahr. At the Pioneer Lockworks, Messrs J. H. Johnson & Co., and at the Krishna

Stores, petrol and motor accessories are available.

Aligarh, "the high fort," is the name of the considerable fortress which adjoins and protects the town of Koil, situated in the well-cultivated plain between the Jumna and Ganges. This town (64,825 inhabitants) is of undoubtedly great antiquity, and Buddhist remains have been found in excavating the eminence on which the citadel of Koil stood, which was in earliest times the stronghold of a powerful Rajput Chief. Kutb-ud-din Aibak marched from Delhi to Koil, "one of the most celebrated fortresses of Hind," in 1194. In 1252 A.D. Ghias-ud-din Balban was governor of Koil. He set up a great minaret, which was inscribed with the name which he had before he ascended the throne—"Baha-ud-din Shamsi," and dated 1254 A.D. In 1862 this pillar, by an extraordinary act of vandalism, was pulled down.

Ibn Batuta mentions Koil in his account of his embassy from Delhi to China, 1342 A.D. He calls it a fine town surrounded by mango groves. In the 15th century it became the scene of many a battle between the armies of Jaunpur and Delhi. An inscription in the fort of Koil records its construction during the reign of Ibrahim Lodi, 1524 A.D. After the death of Aurangzeb (1707) Koil was considered by the Mahrattas, Jats, Afghans, Rohillas, and other factions to be of great strategical importance as commanding a number of main roads, so that the Aligarh district became the battlefield of rival armies. In 1759 A.D. the Afghans, under Ahmad Shah, expelled the Jats from Koil, and about 1776 A.D. Najaf Khan¹ repaired the fort of Ramgarh and changed its name to Aligarh. In 1784 Maharaja Scindia captured Aligarh, in which he found

¹ See p. 230.

treasure in specie and jewels amounting to a crore of rupees. In 1788 it was taken by Ghulam Kadir Khan,¹ and retaken by Scindia, and here, with the aid of De Boigne, that prince organised his battalions after the European fashion, the fort being made almost impregnable. In 1796 De Boigne was succeeded by Perron, who, when the British declared war against Scindia in 1803, took refuge with the British. Aligarh was then taken (29th August 1803) by a brilliant *coup de main* by Lord Lake, when 281 guns were captured in it.

When the news of the mutiny at Meerut arrived, on the 12th of May, Aligarh was garrisoned by 300 sepoys of the 9th Indian Infantry, who mutinied on the 19th. Among those who were compelled to seek refuge in Agra was Lady Outram, who was living with her son, the late Sir Francis Outram, a recently-joined member of the Civil Service. On the 26th Lieutenant Cockburn reached Aligarh with a detachment of troopers, who held their ground there up to the 21st of June; but were soon after obliged to retire to Agra. On the 5th of October Colonel Greathed's column from Delhi occupied Koil.

The Civil Station of Aligarh lies N.E. of the city, from which it is separated by the railway. It includes the old Cantonment, which was abolished in 1869. It is well planted with trees, and has a large *maidan*, the old parade ground, in the centre.

The principal thoroughfares are the Anupshahr Road, which runs from the overhead railway bridge past the W. side of the *maidan* and the road from the railway station which ultimately joins the Anupshahr Road beyond the College.

On the left of the Anupshahr Road lie the District School, the

Judges' Courts, a fine new building, a cemetery, Jail, and the District Office and Courts. Opposite the Judges' Courts is the Cattle Garden, containing the Crosthwaite Hall, which is used for Municipal and District Board meetings, and the Harrison Clock Tower, named after a former Collector of Aligarh. From the Postal Workshop all the requirements of the post offices in India, such as bags, forms, dies, etc., are supplied. Probably from the impetus given by these works a considerable number of metal works have sprung up, especially lock works. The *Lyall Library* was founded by the Hindus of Aligarh, and is built in the modern Saracenic style. The old cemetery of 1802 lies towards the fort.

The object of chief interest is the Muhammadan *Anglo-Oriental College*, founded by the late Sir Saiyad Ahmad Khan, K.C.S.I., LL.D., for the education of Muhammadans of the upper class. The building is on the plan of an Oxford or Cambridge College, and is surrounded by grounds covering about 100 acres. It was opened in 1875, and has since made rapid progress; the Hyderabad State contributes Rs.24,000 yearly to the funds. It consists of two departments—a College and a School: and its inmates, some 500 boys and 700 young men, come from all parts of India. The Principal and four Professors are English University men, and the Headmaster of the school is also an Englishman, and there are seven Indian Professors and four Assistant Professors. It receives an annual grant from Government. It is governed by a body of Muhammadan trustees, and, as it is in no way connected with the State, careful instruction in the Muhammadan religion is given in it. Considerable prominence is given to the encouragement of manly sports, and the institution marks a new and interesting departure in Indian education. The visit of

¹ See pp. 262 and 281.

King George V., then Prince of Wales, to the College on 8th March 1906 gave unbounded satisfaction to the Muhammadan community of India.

The *Fort of Aligarh*, 2 m. N. of the town, was built in 1524, and reconstructed by French engineers under De Boigne and Perron in the 18th century, and was further improved after its occupation by the British. It is surrounded by a ditch 18 ft. deep and from 80 ft. to 100 ft. wide. The main entrance is on the N. There is no garrison now. General Perron's House is $\frac{1}{2}$ m. to the S. of the fort, between it and the College, of which it now forms a part. It has a square gateway in front, with an arched entrance and a guard-room above it. In the garden is a well with a Persian inscription.

In the City of Koil, at the top of a long and rather steep slope, is the principal mosque, with three central domes, two side domes, and four minarets. It was built by Sabit Khan in 1728 during the reign of Muhammad Shah. The architecture is in the debased style of the 18th century; yet the mosque is by no means without beauty and even dignity. The eminence on which it stands is called the Bala Kila, and in it have been discovered remains of Buddhist and Hindu temples, some of which have been placed in the compound of the Institute.

S.E. of the great mosque is the *Moti Masjid*, or "Pearl Mosque." In the city is a fine tank surrounded by small Hindu temples and shrouded by magnificent trees swarming with monkeys.

The Aligarh annual Fair (held early in February) usually offers special opportunity for witnessing the inner life of an Indian district.

97 m. Hathras junction station. The East Indian Railway is here crossed by the Cawnpore-Achnera line of the Bombay-Baroda, and

Central India Railway (Route 12). The branch to Cawnpore (189 m.) passes Fatehgarh (105 m.), Farrukhabad (101 m.), and Kanauj (138 m.). The Europeans at Fatehgarh in 1857 defended themselves for some time after the outbreak of the Mutiny on 18th June, but were finally compelled to leave the gun-carriage factory which they held, and attempted to escape to Cawnpore in boats. Most of them were killed on the way, and the few who reached Bithur (p. 407), and were captured there, were murdered on the 10th and 15th July with the survivors of Cawnpore. Kanauj, the famous northern capital, first of the Tomar and then of the Rathor Rajputs, was taken by Mahmud of Ghazni in 1018, and by Shahab-ud-din Ghori and Kutb-ud-din Aibak in 1194, whereupon the Rathors removed to Rajputana and finally settled at Jodhpur. The ruins of this great city which now remain are very scanty. It was at Kanauj, too, that the Emperor Humayun was finally and totally defeated by Sher Shah in 1540 A.D.

The thriving town of Hathras (population 37,854) is 6 m. from the station.

127 m. Tundla junction (R.). A line from here runs W. into *Agra*, distant 15 m. (see p. 229). Visitors to Agra book to the Fort Station. Some of the E.I.R. trains run to this, and some diverging at the Jumna Bridge junction to Agra City, reached by the modern Strachey Bridge of nine spans of 154 ft. clear. As the bridge over the Jumna is approached a splendid view of the Taj and the fort on the opposite bank is obtained.

150 m. Shekohabad junction for line to (66 m.) Farrukhabad.

184 m. from Delhi is Etawah station * (R., D.B.), 720 m.

from Calcutta; by road it is 71 m. from Agra, 61 m. to Fatehgarh, 33 m. to Mainpuri, 66 m. to Gwalior (with State R.Hs. at intervals). No hotel or petrol store at Etawah. It is properly *Itawa*, popularly derived from *Int*, "a brick" (45,350 inhabitants), headquarters of the District of the same name, and is said to have been founded by a Chauhan Chief, descended from the famous Prithvi Raja, King of Delhi (p. 275). The town and District were captured by Kutb-ud-din Aibak in 1193, but the Chauhans regained their power and held it till the reduction of Etawah in 1392 by Muhammad bin Firoz, who destroyed the old Hindu fort. Successive punitive expeditions followed till 1432, and then for a time Etawah passed into the hands of the Sharki Sultans of Jaunpur, who built the extensive brick fort overlooking the Jumna. The rule of Delhi was restored in 1487 by Bahlol Lodi. Etawah rose to some importance under the Mughal Emperors, and then was held in succession by the Nawab of Farrukhabad, the Nawab Wazir of Oudh, the Rohillas and the Mahrattas. In 1774 it again came under the Oudh Government, but the headquarters were removed from Etawah to Kudar-kot, 23 m. E., and the fort was dismantled. The district was ceded to the East India Company in 1801. In the Mutiny the civil officers were forced to retreat to Agra; but the District was soon regained by Mr A. O. Hume, C.S., the Collector, who raised a local force and fought several important actions against the rebels.

The City stands picturesquely amongst a network of ravines on the N. bank of the Jumna, at a point where it bends sharply backwards on its own course. It is divided into two parts, a ravine from N.W. to S.E. separating the old city on the S. from the new. In the centre of the city is *Hume Ganj* Square, called after Mr Hume,

and adjoining it is a *sarai* with a fine gateway. $\frac{1}{2}$ m. to the N. lies the *Civil Station*.

There are very few ancient buildings. The *Jami Masjid*, on high ground going toward the Jumna, was built, possibly from old Hindu materials, by one of the Jaunpur kings. The screen, 47 ft. high, before the dome is similar to that of the Atala Masjid of Jaunpur (p. 377). The façade is 130 ft. long, but only 20 ft. deep.

The *Bathing Ghats* on the Jumna, below the ruined fort, are picturesque and worth a visit. From them is seen the white *spire* of a modern *Jain temple*.

270 m. from Delhi is CAWN-
PORE junction station, 633 m. from Calcutta, 839 m. from Bombay; by road Cawnpore is 17 m. to Bithur, 49 m. to Lucknow, 70 m. to Orai, 136 m. to Jhansi, 40 m. to Hamirpur, 134 m. to Etah, 48 m. to Fatehpur, 119 m. to Allahabad, 190 m. to Jhansi *via* Hamirpur. * The junction of five railways—East Indian: Bombay Baroda and Central India: G.I.P.: Bengal and N.W.: Oudh and Rohilkhand. A new railway has recently been made from Cawnpore to Hamirpur and Banda. Comfortable and convenient waiting-rooms.

The City (population 195,498) is situated on the right bank of the Ganges in lat. $26^{\circ} 28'$, long. $80^{\circ} 24'$; old Cawnpore is 2 m. to the N.W. of the present city. The name means City of Kan, or Krishna. It is a great emporium for harness, shoes, and other leather-work, and the principal centre of the mill industry in N. India, and is likely to receive many important improvements by an early date. Its importance dates from its cession to the East India Company by the Nawab Wazir of Oudh. It is of no great antiquity, and owes its present size and importance entirely to the British. Within the last forty

years it has become the industrial and commercial centre of N. India—the result of European enterprise. New industrial undertakings are constantly being established. There are also a Government Experimental Farm and Agricultural College, worth seeing. The native city, which has some fine bazars and markets, always presenting a scene of bustle, lies to the left (N.W.) of the Cantonment; while the Civil Station and most of the mills and factories lie N.W. again of the city and near the river.

On the Sirsaya Ghat there is a statue of the Queen - Empress Victoria, the work of a local artist. A fine building in the Queen's Park, intended to be a public library and place of entertainment has been erected as a memorial of King Edward VII. At present it is being used as a hospital for wounded soldiers. The tail of the Ganges Canal separates the S.E. side of the city from the Sadr Bazar of the Cantonment, and the railway to Lucknow runs to the Ganges bridge outside the latter.

The chief interest of the place for Englishmen lies in the sad events of the Mutiny in June 1857,¹ which ended in the cowardly massacre of a large number of women and children. The Cantonment at the time straggled for 6 m. or 7 m., and though containing an unusually large non-combatant population, was imprudently garrisoned with about 3000 Indian soldiers and only 60 Europeans. Dhundu Pant, known as the Nana Sahib,² the adopted son of Baji Rao II. Peshwa, whose claims to succeed to the large pension enjoyed by the ex-Peshwa had been rejected by the British Government, was

living near, at Bithur, on friendly terms with the English at Cawnpore. His palace at Bithur was destroyed by the British.

Sir Hugh Wheeler, a gallant veteran commanding the Division, doubted the fidelity of the sepoys, and resolved to store with provisions one spot which should be a rallying point for those under his charge. The natural position to select was the Magazine in the N.W. corner of the civil lines which rested on the river, and was surrounded by strong walls. But General Wheeler decided against this, as he would have had to withdraw the sepoy guard, and feared that by showing his mistrust he would hasten the rising. The spot he chose was the centre of a plain lying S. of the city, where there were two barracks. Here he raised some earthworks about 4 ft. high, and barely 2 ft. thick at the crest, the soil being so hard that it was almost impossible to dig it, and so friable that when dug it did not cohere; but it was supposed at the time that the mutineers would at once proceed to Delhi, and that only temporary protection was needed from the city mob. He applied to Sir H. Lawrence for reinforcements, which were generously sent under Lieutenant Ashe and Captain Fletcher Hayes. Much against the advice of others, the General and the Collector asked the Nana to send a body of his retainers for the defence of the Magazine and of the Treasury beyond it in Nawabganj. The same day (22nd May) all the non-combatants betook themselves to the entrenchment. On the 3rd June General Wheeler most unselfishly despatched reinforcements to Lucknow, though knowing that, in case of attack, his own position was not defensible.

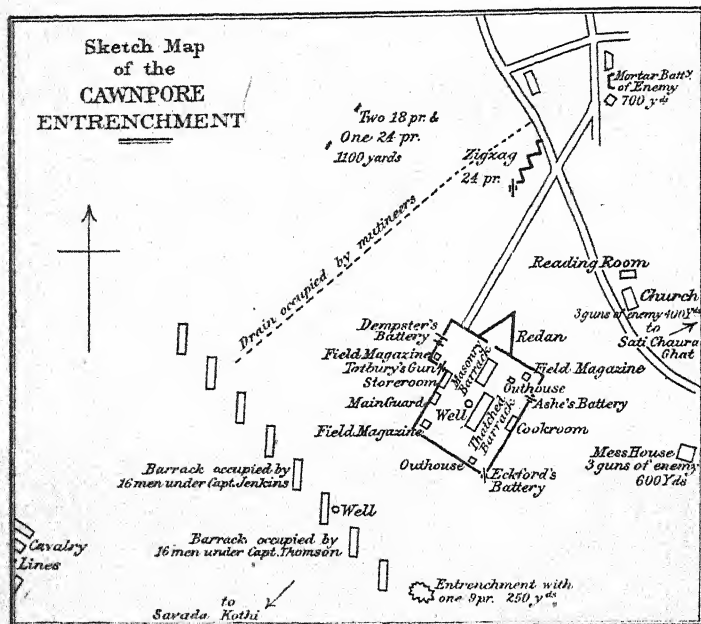
On the night of the 4th of June the 2nd Cavalry rose and galloped off to Nawabganj, where the treasure was. The 1st Regiment

¹ For a graphic account of the siege of Cawnpore, the traveller cannot do better than study T. R. E. Holmes's *History of the Indian Mutiny*: Allen & Co.

² The third Peshwa Balwant Rao had been previously known as the Nana Sahib.

Indian Infantry followed them, and sacked the Treasury, threw open the Jail, burned the Public Offices and the Records, and captured the Magazine with all its ammunition and artillery, with which they prepared to march to Delhi. The 53rd and 56th eventually joined also, after being opened on by the guns in the entrenchment; but 80 men of

about 200 British soldiers and 30 officers, hampered by every disadvantage, and exposed to the continuous fire of 3000 trained foemen, well fed, lodged, and armed. The total number in the entrenchment is estimated at 900, of whom more than half were women and children. There were many heroes in this little band of whom any nation would be proud,



them remained faithful to the end. The whole body of mutineers then started on the march to Delhi, but were persuaded by an emissary of the Nana to return. On 6th June General Wheeler was warned by the Nana to expect an attack; and by noon the siege of Cawnpore had begun.

Never had a besieged garrison been called upon to do greater things than this little body of

and to Captain Moore, of the 32nd, has by common consent been assigned the first place among them.

The position which the doomed garrison had to defend will be understood from the accompanying plan, adapted from Captain Mowbray Thomson's *Story of Cawnpore*. All round it were buildings and cover from which the enemy could maintain a

murderous fire with practical impunity—a mess-house on the E., a Church and reading-room near the N.E. corner, a racquet-court and other buildings opposite the N.W. corner, a deep drain giving shelter to musketry men all along the W., and a row of incomplete barracks on the S., the nearest of which were only 250 yds. from the entrenchment. To prevent the enemy from absolutely enfilading our position it was necessary to occupy two of these, and Nos. 2 and 3 were accordingly held, the former by Captain Glanville first, and then by Captain Mowbray Thomson, of the 53rd Native Infantry, and the latter by Captain Jenkins. By these barracks was a well which served as the general grave of all who were killed or died within the entrenchment. The lines of this were defended by the Redan under Major Vibart, of the 2nd Bengal Cavalry, on the N., by Ashe's Battery and by Eckford's on the E., by Totbury's Gun and Dempster's Battery in a projection on the W. side, and by brave hearts all round; but except for repelling assaults and keeping the enemy at a greater distance the guns were of but little avail. The two barracks, one of them with a thatched roof, were entirely unprotected, and the only well in the entrenchment, 60 ft. deep, was exposed to the full fire of the enemy. And yet the dauntless British few held out for twenty days, and then only yielded because provisions were nearly exhausted. The proximity of the enemy's guns to the entrenchment would be incredible were it not that the distances were carefully recorded immediately after the recapture of the place in July. By the 11th June the enemy had three mortars, two 24-pounders, three 18-pounders, one or two 12- and 9-pounders, and one 6-pounder playing on the entrenchment; and on the 12th June the

thatched barrack was set on fire, and thereafter over 200 of those within the entrenchment lived day and night in the open in a temperature of 120 to 140 degrees of heat. On the 15th June Captain Moore led a successful sally, which resulted in the spiking of five guns and the blowing up of a 24-pounder; but the supplies from the captured magazine were practically inexhaustible, and such bravery could produce no permanent results. No wonder that one-third of the numbers of the defenders were lost by the 21st June, that over 250 persons were buried in the outside well before the siege ended, that of fifty-nine artillery men only four survived at the end, and that when the British troops re-entered Cawnpore they found that there was not a single square yard in the buildings in the entrenchment that was free of the scars of shot. On the 16th June the enemy received reinforcements from Lucknow, and on the 23rd, the anniversary of Plassey, they attempted a home assault, which cost them over 200 of their numbers. On the 25th the Nana offered terms to the survivors, and these were accepted for the reason already given, though General Wheeler's voice was against surrender.

On the 26th there was an armistice, and it was arranged that the British should evacuate their fortified position, and, leaving their guns and treasure, should march out with their arms and 60 rounds of ammunition for each man, the Nana promising safe-conduct to the river-side and a supply of boats to take them down the Ganges. The next morning, 27th June, the survivors, about 450 in number, marched down to the Sati Chaura Ghat, and went on board the boats. It was 9 A.M. before they were all embarked, Major Vibart entering last of all. Then, on the order of Tantia Topi, a bugle sounded, the native boat-

men left the boats fixed in the mud, and a murderous fire of grape-shot and musketry opened on all sides. The thatch of the boats took fire, and while the sick and wounded were suffocated in them, the sepoys jumped into the water and butchered others. Orders then came from the Nana to kill no more women, and about 125 women and children, wounded and half drowned, were carried back to Cawnpore.

One boat, which, as it happened, had been pushed off by the very bravest of the defenders, drifted down the river, and those on board propelled it as they could, with numbers rapidly diminished by the fire from the banks—Moore, Glanville, Ashe, and Fagan all being shot on it. For thirty-six hours it floated down stream, pursued and attacked by the enemy on all sides. On the second morning the occupants woke to find themselves in a side stream with sepoys on the banks ready to overwhelm them. Two officers and eleven soldiers gallantly leapt ashore and dispersed the astounded crowd. But meanwhile the boat had drifted out of sight and was lost to them, and they were compelled to take refuge in a small temple, in which they were surrounded. Breaking out, and once more scattering the armed mob, they took to the river, and four of them—Captains Mowbray Thomson and Delafosse, and Privates Murphy and Sullivan—being strong swimmers, reached the Oudh shore, and being succoured by the Talukdar of Murar Mau, afterwards Sir Digbijai Singh, lived to tell the story of Cawnpore. The boat was subsequently overtaken by the enemy and brought back with its eighty survivors. The men who survived in it were shot by order of the Nana, and the women and children sent to join the 125 who had been spared at the Massacre Ghat in the

Savada Kothi,¹ where the Nana lived during the siege. They were afterwards removed to a small house called the Bibi-garh, near which the Nana was residing in a hotel. This house contained two rooms, 20 ft. by 10 ft., and a number of dark closets, and had a courtyard 15 yds. square in front of it; and in it between the 7th and 14th of July twenty-eight of the captives died.

But retribution was not far off. On the 7th of July General Havelock marched from Allahabad with 1400 British and 600 Sikhs. On the 12th of July, at 7 A.M., they halted at Balinda, 4 m. from Fatehpur. Here they were attacked by the Nana's army, and inflicted a crushing defeat on it. On the 15th of July Havelock again defeated the rebels at Aong, and drove them over the bridge across the Pandu Nadi, and the Nana, on learning that the British were advancing upon him, ordered the massacre of the captives in the Bibi-garh. The few men among them were brought out and killed in his presence. A party of sepoys were then ordered to shoot the women and children, but they intentionally fired at the ceiling of the rooms, though they belonged to the regiment which had murdered the seven Ensigns at Allahabad. Then a party of butchers were sent in to accomplish the foul deed, and all was quickly over. In the morning all the bodies were thrown into an adjoining well.

The Nana went out to oppose General Havelock with 5000 men and a formidable train of artillery, but the battle, fought 2 m. S. of the Cantonment on 16th of July, ended in the confused flight of the rebels to Bithur, after they had blown up the Magazine. On the 17th the British force marched on to occupy the Cantonments, but

¹ This lay to the W. of the row of incomplete barracks, and of the race-course W. of them, close to the Grand Trunk Road.

ere it reached them learned the mournful story of the massacres.

Four months later Cawnpore—which had been the base of operations for General Havelock's advance on Lucknow, several times begun and as often suspended—was the scene, once more, of bloody engagements. Sir Colin Campbell marched thence on the 9th of November 1857 to relieve Lucknow, leaving behind him for the protection of Cawnpore, his base of operations, 500 British and 500 Madras troops, commanded by Major-General Windham, of Redan celebrity. On the 27th of November, Sir Colin began his march back to Cawnpore, having with him 2000 women, children, sick, and wounded, and the treasure which had been rescued from Lucknow. On nearing the Bridge of Boats, on the 28th, he beheld a conflagration, which showed him that the enemy had taken the city to which he was returning.

What had happened was that Tantia Topi, a follower of the Nana, at the head of 15,000 of the Gwalior insurgents, had marched on Cawnpore, and by well-concerted movements, completed on the 19th of November, had cut off the place from all communication with the W. and N.W., from which its supplies had been obtained. On the 26th General Windham moved out from Cawnpore and attacked and repulsed Tantia's right wing; but on the two following days he was gradually driven back to his entrenchment on the river-side, leaving the bridge—the link with Lucknow—dangerously exposed. Sir Colin arrived just in time to save the bridge, but the clothing and stores prepared for the refugees from Lucknow fell into the hands of the rebels. Having despatched his convoy of ladies and wounded to Allahabad, Sir Colin, on 6th December, took the initiative. The arrangements made for driving

the enemy back from their line—which rested on the city and the brick kilns to the W. of it, and extended nearly as far as the Ganges Canal on that side—were completely successful; the Gwalior camp, with all its stores and magazines, was taken, and the enemy routed with great slaughter to beyond the canal. Owing to blundering the pursuit of their right and centre was not properly pressed at the time; but it was taken up next day by Brigadier-General Hope Grant, who finally scattered the enemy and captured fifteen guns.

There is one more sad memory connected with Cawnpore—the death there of Captain Sir Wm. Peel, the gallant leader of the Naval Brigade from the *Shannon*. He had been wounded on the taking of the Martinière on the 8th April, and unfortunately contracted small-pox from a dhooly in which he was taken to Cawnpore (having refused to occupy a stage-carriage, which his sailors had upholstered for him), and died there on 27th April. He is buried in the old cemetery $\frac{1}{2}$ m. W. of the entrenchment. Among all the bravest men who fought to put down the Mutiny was none braver than he.

On the way to the Memorial Church, which is about $1\frac{1}{2}$ m. distant from the railway station, is the site of General Wheeler's *Entrenchment*. The line of defences and the principal buildings inside them are indicated by pillars, those of the former being connected by a low hedge. To the S., across the road and adjoining the barracks, is a small garden enclosure surrounding the well in which 250 of the garrison were buried. The inscription on the cross runs: *In a well under this Cross were laid, by the hands of their fellows in suffering, the bodies of men, women, and children, who died hard by during the heroic defence of Wheeler's Entrenchment*

when beleaguered by the rebel Nana.

—June 6th to 27th, A.D. MDCCCLVII.

The Memorial Church, built on the N.E. edge of the entrenchment, is in the Romanesque style; it cost over £20,000, and was consecrated in 1875. It contains a series of memorials to those who fell near here in the Mutiny. A fine view of Cawnpore is obtained from the belfry. Outside the church, on the S. side, is a railed memorial slab with an inscription commemorating "those who were the first to meet their death, June 1857," and a few yards farther E. is another enclosure with a cross recording—

"Here lie the remains of
MAJOR EDWARD VIBART,
and Regt. Light Cavalry,
And about 70 officers and soldiers,
Who, after escaping from the
Massacre at Cawnpore,
On the 27th of June 1857,
Were captured by the rebels at Shivrajpur,
And murdered on the 1st of July."

The Sati Chaura Ghat is about $\frac{1}{2}$ m. N. by E. of the Church. A grassy road between banks 10 ft. or 20 ft. high, lined with trees, among which the murderers concealed themselves, leads down to the river. On the bank is a temple of Siva, of hexagonal shape, old and going to ruin. Narrow flights of steps lead from this temple to a broad enclosure flight, which in the cold season descend some way to the water. It is only too easy to imagine the terrible scene which took place here on 27th June 1857. 1 m. up the stream, near the fine bridge of the O.R. Railway, was the pontoon Bridge, over which the convoy, 3 m. long, of women and wounded, brought from Lucknow by Sir Colin Campbell, passed; and here was Windham's small entrenched camp, the site of which is now occupied by the Government Harness Factory. From the head of the Sati Chaura Ghat ravine the road runs N. over the railway and the Ganges Canal and past

the Queen's Park, with a statue of the Queen-Empress, to the Memorial Gardens, situated at the E. corner of the city. These are beautifully laid out and well kept, and in the middle, upon a mound raised over the well in which the victims of the Bibi-garh massacre were buried, is the memorial, in the form of an octagonal Gothic screen designed by Sir Henry Yule, R.E. In the centre of the enclosure, on the actual well, is the figure of the *Angel of the Resurrection* in white marble, by Marchetti, with arms crossed on her breast, as if resigned to the Almighty Will, each hand holding a palm, the emblem of peace. This figure was the gift of Lord and Lady Canning. Over the arch is inscribed: "These are they which came out of great tribulation." Around the screen wall which marks the circle of the well is the legend: "*Sacred to the perpetual Memory of a great company of Christian people, chiefly Women and Children, who near this spot were cruelly murdered by the followers of the rebel Nana Dhundu Pant, of Bithur, and cast, the dying with the dead, into the well below, on the xvth day of July MDCCCLVII.*" Neither the screen nor the statue can be considered quite satisfactory. In front of the monument is a small enclosed cemetery. Two of the tombs in it are to the memory of the women and children of the 1st Company, 6th Battery, Bengal Artillery, and those of H.M.'s 32nd Regiment, who were slaughtered near this spot. Near the Memorial Gardens is the Queen's Park, containing a colossal statue of Queen Victoria in bronze.

Cawnpore to Lucknow, 46 m. by railway. Both the broad-gauge and the narrow-gauge lines run over this length of country.

As far as Aigain (22 m.) the railway closely follows the road along

which Sir Henry Havelock and Sir Colin Campbell advanced to the relief of Lucknow. Beyond Unao (13 m.) and near Ajgain is Basirat-ganj, where the enemy was thrice defeated by the former. The line passes N. of the Alambagh, and the railway station at Lucknow is situated at the Charbagh (p. 385), on the S. side of the old canal of Ghazi-ud-din Haidar.

317 m. **Fatehpur** (no hotel : but a D.B. close to the railway station, and an Inspection Bungalow on the Grand Trunk Road). The headquarters of a District, and once a place of some importance. It is 48 m. by road to Cawnpore and 71 m. to Allahabad. There are roads also N.E. to Rai Bareli and S.W. to Banda. On the outbreak of the Mutiny here, on 9th June 1857, most of the Europeans escaped to Banda ; but the Judge, Mr R. T. Tucker, who refused to quit his post, was killed fighting valiantly to the last. He took up his position on the roof of the Court building and was only overcome when this was set on fire. The Commissioner of Allahabad wrote :—" It is impossible not to admire, how far it may be regretted, the heroic devotion of the late Mr Tucker ; nor is it much a matter of wonder that his conduct and his personal prowess actually succeeded in preserving for a few hours longer some show of order. Mr Tucker, by his earnest and open profession of religion, and by his unbounded personal liberality, had commanded the respect, if not the affection, of a large number of the inhabitants of the city, and, when the excited mob returned in triumph from his slaughter, two Hindus of the town stood out before them and reviled them as the murderers of a just and holy man : it is scarcely necessary to add that they immediately shared his fate." In the Fatehpur cemetery Mr Tucker's

devotion to duty is commemorated on a tombstone. Evidence of his religious enthusiasm still survives in four huge masonry pillars erected by him on the Grand Trunk Road, to the W. of the town, close to the Inspection Bungalow. Two of these pillars bear inscriptions, in Urdu and Hindi, giving the substance of the Ten Commandments. Similar Urdu and Hindi inscriptions on the other two pillars are quotations from St John's Gospel. On 12th July 1857 General Havelock, after routing the rebel forces and capturing 12 guns, re-occupied the town. He was accompanied by Mr Sherer, who was appointed to the charge of Fatehpur and Cawnpore. On the 31st October 1857, the Naval Brigade, under Captain W. Peel, and a small force under Colonel T. S. Towell, of the 53rd Regiment, reached Fatehpur. Mutineers, 2000 strong, were reported to be occupying a position at Khajuha, in the N.W. of the district. Towell at once sought out the enemy. When attacking on 1st November he was shot through the head, whereupon the command devolved on Peel, whose Brigade carried the enemy's position. The action is commemorated on Towell's tomb outside the village of Kunwarpur, 9 m. from Fatehpur, within sight of the metalled road running from Fatehpur to Bindki (17 m., the most important mart in the District) and Khajuha (21 m., a decayed town of some historical importance) and not 2 miles from the Malwa station of the E.I. Railway. It was at Khajuha that the Emperor Aurangzeb overthrew his brother Shuja, capturing 114 guns, 115 elephants, and much treasure. In honour of his victory he built a large *sarai*, enclosing 10 acres, and laid out the Badshahi Bagh, a walled garden covering 18 acres. One of the old garden pavilions, on high ground, has been converted into a good Inspection Bungalow,

which affords to a traveller an excellent spot for breaking a journey.

354 m. Sirathu (in the Allahabad District), for Kora. This place was once of equal importance with Allahabad, which was known as the Province of Allahabad and Kora. There are still some interesting remains and ruins at it. It was here that Ala-ud-din Khilji basely murdered his uncle, the Emperor Jalal-ud-din, in 1296.

389 m. Allahabad junction (p. 41). The line passes the Khusru Bagh and affords glimpses of the mausolea in it.

ROUTE 23.

(a) CALCUTTA by the East India Railway loop-line to Lakhisarai and Mokameh by Nalhati Junction (Azimganj), Tinpahar Junction (Rajmahal, visit to Malda for Gaur and Pandua), Bhagalpur, and Jamalpur, for Monghyr.

(b) MOKAMEH to TIRHUT.

(c) CALCUTTA to Plassey and Murshidabad by Eastern Bengal Railway and on to Malda.

(d) CALCUTTA by Eastern Bengal Railway to Darjeeling by Ishurdi, Siliguri, and Kurseong. Routes into, and in, Sikhim.

(a) Lakhisarai and Mokameh by Nalhati (Azimganj), Tinpahar (Rajmahal), Bhagalpur, and Jamalpur, for Monghyr.

Howrah (p. 95).

67 m. Burdwan (p. 55).

75 m. to Khana junction (see p. 55). Here the loop-line branches off N. to

145 m. Nalhati junction station. Here it is necessary to change for the Nalhati State Railway, branching E. to

27 m. Azimganj station. (There is a D.B. at Jiaganj, opposite Azimganj.) On the right bank of the Bhagirathi River, about 5 m. above Murshidabad. The E.I. Railway is opening a new station (name not yet fixed) on the Bandel-Barharwa line opposite Murshidabad. The population of the municipal area of Azimganj is 12,327 (census of 1911). It is an important centre of the Jains. The Bhagirathi is here 700 ft. broad, and rises in the rains 25 ft., when the current runs 7 m. an hour. During the rains a steamer service between Azimganj and Berhampore is open; if a conveyance has been arranged for, the river may be crossed to the E. bank, from where a metalled road leads in 5 m. to

Murshidabad. This place is reached direct from Calcutta now, and is described under route (c).

195 m. Tinpahar junction station.

A branch line runs N.E. (7. m.) to

202 m. Rajmahal station, a sub-District of the Santal Parganas. The town stands on the W., or

right, bank of the Ganges. It was once the capital of Bengal, and has many historical associations, while it affords opportunities of seeing some specimens of the remarkable tribe of Santals.

Up to 1592 A.D. it was known as Agmahal, but when Raja Man Singh (p. 197), Akbar's famous Rajput general, returned from the conquest of Orissa in 1592 A.D., he made it the seat of his Government, and changed its name to Rajmahal. In 1607 Islam Khan transferred the seat of Government to Dacca, but it was again brought to Rajmahal by Sultan Shuja in 1639. In the beginning of the next century Murshid Kuli Khan transferred the Government to Murshidabad, and Rajmahal fell into decay. In 1863 the Ganges abandoned its channel, and Rajmahal was left 3 m. distant from the main stream, and this finally completed the fall of the place. The river has since returned to its old bed, but Rajmahal has ceased to have any commercial importance.

N. of the station are the sub-Divisional Officer's Office (formerly the Mughal Governor's house) and other public buildings. A little farther on are remains of a building called the *Sangi Dalan* ("Hall of Stone"). It is 100 ft. long from N. to S., and has three doors of black basalt in the centre. This is said to have been part of the palace of Sultan Shuja, son of Shah Jahan and Governor of Bihar.

The *Maina Tank* is $\frac{3}{4}$ m. due W. of the *Cutcherry*. At its S. end is a massive brick building, with an Arabic inscription; and 100 yds. to the S. is the Maina Mosque. There is a tomb of a Maina Bibi.

The *Hadaf* is 4 m. to the N.W. The road leads through a forest of tall trees, with ruined buildings at intervals. At $1\frac{1}{2}$ m. it passes a solid brick building on the right hand, called the Tanksal, or Mint, with walls $5\frac{1}{2}$ ft. thick. The

Hadaf ruins are about 200 yds. off the road to the left, and are much hidden by the jungle. The entrance to the quadrangle is by the E. gateway, which is much injured. The mosque proper has a façade 200 ft. long, with seven arches, each 22 ft. high. In the centre of the quadrangle is a reservoir, with steps down to the water. The buildings are surrounded by dense jungle, but the actual structures have been cleared.

The journey to English Bazar, the headquarters of the Malda District, 24 m. distant, used to be made by road from Rajmahal. It can now be made by railway from Murshidabad or Katihar (pp. 419, 425) in 3 to 5 hours.

English Bazar * (14,000 inhabitants) is situated on the right bank of the Mahananda about 4 m. below Old Malda, from which the District takes its name. The place is not often visited by travellers, and arrangements for the present journey by road should be made by writing to the Collector at Malda. The distance from English Bazar to the N. edge of Gaur is about 4 m., and to the principal mosques 11 m.; and to the Adina Mosque at Pandua is also about 11 m. The visit to each of these places will occupy a whole day.

Old Malda lies at the confluence of the Kalindri with the Mahananda. It is an admirable position for river traffic, and probably rose to prosperity as the port of the Muhammadan capital of Pandua. During the 18th century it was the seat of thriving cotton and silk manufactures, and the French and Dutch had factories at it. The English factory, established in 1656, however, was always at English Bazar, lower down the Mahananda, and on the opposite bank of the river.

The ruins of Gaur and Pandua,

successive capitals of Bengal, are very picturesque and interesting, but chiefly, of course, to the antiquarian. The sites of these old cities are being rapidly brought under the plough, and the dense jungles which thirty years ago sheltered tigers and leopards no longer exist.

Gaur was the metropolis of Bengal under its Hindu Kings. Its most ancient name was Lakhnauti, a corruption of Lakshmanawati. But the name of Gaur also is of great antiquity, as is found in the *Gauriya Brahmana*. Its known history begins with its conquest, about 1200 A.D.,¹ by the Muhammadans, who made it the chief centre of their power in Bengal for more than three centuries. A son of the Emperor Altamsh was Governor here, and the eldest son of Balban, Nasir-ud-din Bugra, became King of Bengal and refused the throne of Delhi. He was succeeded by two sons and a grandson, and then, about 1350, one Ilyas founded a kingdom which, with an interregnum, lasted till nearly 1500 A.D. When the Afghan Kings of Bengal became independent they made Pandua their capital (c. 1354 A.D.), and robbed Gaur of all the building material that could be removed. This accounts for the number of sculptured Hindu stones amongst the ruins of Pandua. When Pandua was in its turn deserted Gaur again became the capital, and was called Jannatabad ("Terrestrial Paradise"), a name which occurs in the *Ain-i-Akbari*. It was sacked by Sher Shah in 1537, and the last of the Afghan Kings, Daud Khan, was absorbed into Akbar's empire in 1573 A.D. The city was entirely ruined by an outbreak of the plague in 1575. Contemporary narratives describe the place, in its prime, as ex-

tremely populous, containing the residence of the court and numerous seats of learning, and enjoying an immense trade.

The dimensions of the city proper, within the great continuous embankment, are $7\frac{1}{2}$ m. from N. to S., and 1 m. to 2 m. broad. The W. side was washed by the Ganges, which flowed where the channel of the Little Bhagirathi now is. The E. side was protected by the Mahananda and by swamps. On the S. the Mahananda joined the Ganges, and left little space for an enemy to encamp. On the N. a fortification 6 m. long extends in an irregular curve from the old channel of the Bhagirathi at Sonatala to near the Mahananda and Bholahat. This rampart is 100 ft. wide at base.

In front of this rampart lay the most celebrated piece of artificial water in Bengal, the Sagar Dighi, 1600 yds. long by 800 yds. broad, dating from 1126 A.D. On the bank is the tomb of Makhdum Shaikh Akhi Siraj-ud-din and a small mosque, and S. of these is a *ghat* called S'adullapur, leading down to the sacred river. S. of this rampart was the N. suburb, between which and the city was another strong rampart and ditch. Towards the Mahananda the city rampart was double, and in most parts there have been two immense ditches, and in places three.

1 m. inside the city to the S., on the Bhagirathi, was the *Citadel*, 1 m. long from N. to S., and from 600 yds. to 800 yds. broad. The brick wall was very strong, with many flanking angles, and round bastions at the corners. On the N. side is the fine Dakhil Gate. It is built of small red bricks, and has been adorned with embossed bricks, which can still be seen on the towers at the four corners. The arch of the gateway is about 30 ft. high, and forms a corridor 112 ft. long. In the S.E. corner of the citadel was the palace, surrounded by a brick wall 66 ft.

¹ Blochmann says 1198 A.D.; Mr Thomas, 1202; Major Ræverty, 1194.

high and 8 ft. thick, with an ornamented cornice—hence called the *Bâis Gaji*, "Twenty-two Yards Wall." At the S.E. corner of the citadel are two mosques; the smaller one, called the *Kadam Rasul*,¹ built by Nasrat Shah in 937 A.H. (1530 A.D.), is now kept in repair by the Indian Government. In connection with this mosque is preserved a stone, bearing what is reputed to be a footprint of the Prophet Muhammad. This is now in the custody of one Fayyaz Husain of Mahdipur, who produces it for the inspection of visitors. Mr Fergusson says of its style: "It is neither like that of Delhi, nor that of Jaunpur, nor any other style, but one purely local, and not without considerable merit in itself; its principal characteristic being heavy, short pillars of stone supporting pointed arches, and vaults in brick. The solidity of the supports goes far to redeem the inherent weakness of brick architecture. It also presents, though in a very subdued form, the curved linear form of the roof, which is so characteristic of the style." Near it are the domed tomb of Fateh Khan and S.E. gateway of the citadel. Half a mile N. of this, outside the E. wall of the citadel, is a lofty brick tower, known as *Pir Asa Minar*, which had a chamber with four windows at the top, to which access was gained by a winding stair. The correct name of this tower is Firoz Shah Minar, *Pir Asa* being a local corruption. It was probably erected by Husain Shah in commemoration of his victories in Assam. Sir W. W. Hunter says: "One of the most interesting of the antiquities of the place is a *minar*. For two-thirds of the height it is a polygon of twelve sides; above that circular

until it attains the height of 84 ft. The door is at some distance from the present level of the ground: and altogether it looks more like an Irish round tower than a *minar*." There is, or was, an inscription on this monument which ascribed its erection to Firoz Shah (1490 A.D.).

Half a mile N.W. again of this, and above the N.E. corner of the citadel, is the finest ruin in Gaur—that of the *Golden Mosque*, or *Baradwari*. It measures 168 ft. from N. to S., 76 ft. from E. to W., and is 20 ft. high. The entrance is by an arched gateway of stone 26 ft. in height and 6 ft. in breadth. The mosque in plan is oblong, and originally consisted of four separate colonnades, arched and roofed over, and covered by handsome domes, in all 44 in number. Six minarets or columns of brown stone faced with black marble adorn the building; bands of hornblende about 12 in. in breadth embrace the column from the base to the capital, and are adorned with a profusion of flower work carved in marble. There was a raised platform at the N.W. corner of the mosque, probably for the use of ladies of the Court. Traces of this still remain. The domes are built of brick. The whole appearance of this building is strikingly grand, exhibiting the taste and munificence of the Prince who erected it—viz., Nasrat Shah, 1526 A.D.

Half a mile E. of the Kadam Rasul, on the side of the main road, is the *Tantipara Mosque*, remarkable for the specimens of embossed brickwork with which the front is adorned. It was probably built in 1475 A.D.

Half a mile S. again is the *Lattan Mosque*, also called the Painted Mosque, from the bricks being enamelled in green, yellow, blue, and white, and arranged in bands. When complete the effect of these must have been very striking.

¹ The only detailed account of the ruins at Gaur and Pandua is contained in Mr Ravenshaw's *Gaur*. A brief description will be found in Mr Fergusson's *Indian Architecture*, 2, 253.

Half a mile above it is the Piasbari Tank, with a small R.H. A tradition states that the water of this tank was formerly very impure and injurious to health, and that condemned prisoners were allowed only this water to drink. Piasbari means the "House of Thirst."

In the S. wall of the city is a fine central gate, called the *Kotwali Darwaza*, and S. from it stretches an immense suburb called Firozpur. In it, 2 m. from the S. wall, is the *Lesser Golden Mosque*, which Mr Ravenshaw calls the "gem of Gaur." It dates from the end of the 15th century. The carved stone panels in the front wall display very fine workmanship.

Pandua is 7 m. N.E. from Malda and 13 m. from English Bazar. It was called by the Muhammadans *Firozabad*. The first independent King of Bengal made it his capital. A road paved with brick, from 12 ft. to 15 ft. wide, passes through Pandua, and almost all the monuments are on the borders of it. Near the middle is a bridge of three arches, the materials of which have evidently been brought from the Hindu temples at Gaur, as figures of men and animals are sculptured on them. On approaching the ruins from the S., the first objects that attract attention are the 17th-century shrines of *Makhdum Shah Jalal* and his grandson, *Kutb 'Alam Shah*, called the Chhe Hazari and Bais Hazari, or 6000 and 22,000, from the area with which they were endowed. To the N. stands the small *Golden Mosque*, with granite walls and ten brick domes. An Arabic inscription says that it was built by Makhdum Shaikh, son of Muhammad Al-Khalidi, in 1585 A.D. N. of this is a high building, called *Eklakhi*, as having cost a lakh. It is perhaps one of the finest examples of the

Bengali tomb. It is 80 ft. square, covered by one dome, and contains the remains of Ghias-uddin, his wife, and his daughter-in-law. 2 m. beyond it is the tomb of Sikandar, father of Ghias-uddin, and the greatest of the monarchs who made Pandua their capital. It forms part of the great mosque, called the *Adina Masjid*, the finest specimen of Mughal architecture in Lower Bengal. It was built about 1360 by Sikandar Shah, and shows traces of having been constructed out of Hindu and even Buddhistic remains. The "Buddhist railing" round the W. front is incapable of any other explanation. The Kibla (central hall) and Mimbar (pulpit) are gems of stone carving. According to Mr Fergusson, the ground plan and dimensions are exactly similar to those of the Great Mosque at Damascus. It extends 500 ft. from N. to S., and 300 ft. from E. to W. This space is subdivided by transverse brick walls and stone pillars into 127 squares, each covered by a dome. On the outside are many small windows, highly decorated with carved tiles disposed in arches. The mosque proper is composed of a central apartment and two wings. The first is 62 ft. high in the centre from the floor to the middle of the dome. To the N. of it is a ruined gallery, as in the mosques at Ahmadabad, known as the *Takht Badshahi*.

The only other ruin of note in Pandua is the *Satâisgarh*, said to have been the King's Palace. It is situated opposite the *Adina Mosque*, in the midst of dense jungle. The remains of numerous cells, believed to be baths, may still be noticed.

Tigers are no longer found in the District, and other game is less plentiful than it used to be; the English sportsman who desires to hunt them must be prepared to spend time and money, and must

take advice from experienced Nimrods who know the locality.

From Tinpahar station the loop-line continues N. to

219 m. Sahibganj junction, for Manihari Ghat and Katihar, across the Ganges, on the Eastern Bengal Railway (next column). It is becoming a centre of trade. The industries are *sabai* grass (for paper manufacture) and oil mills; there are stone quarries near.

265 m. Bhagalpur (D.B.) (population 74,349), headquarters of a Division and District in the Province of Bihar and Orissa, picturesquely situated on rolling ground on the S. bank of the Ganges. There is a monument here to Mr Cleveland, who first reclaimed the Santals from savagery and robbery. Ferry and branch line to (23 m.) Thana Bihpur on B.N.W. Railway, and branch line (E.I. Railway) to Bausi, in S. of District.

298 m. Jamalpur junction, headquarters of the Locomotive Department of the East India Railway, and of the Volunteer Corps of that line, and consequently with an important European colony. The sacred Sita Kund hot springs are 3 m. from here.

Monghyr, $5\frac{1}{2}$ m. from Jamalpur, is also the headquarters of a district (D.B., hotel) (population 46,961). The Civil Station is most picturesquely situated inside an old Mughal fort, to which Mir Kasim fell back from Murshidabad in order to be farther from the overwhelming influence of Calcutta. The place is still noted for the manufacture of arms. Within the fort, towards its N.W. corner, a rocky spur projects into the river, on the edge of which

are several picturesque temples; there are few bits of river scenery in India which are more pleasing than this. Ferry and branch line to Sahibpur Kamal, on B.N.W. Railway.

There are several places of interest in the immediate vicinity of Monghyr. Three miles to the E. is the hill called Pirpahar, on which stands a magnificent house, said to have been built by Mir Kasim's Armenian General, Gurgin Khan. A little to the S.E. of this are the sacred hot springs of Sitakund (previously mentioned). About 2 m. S. of Monghyr is the Dakra Nala where are to be seen the remains of an ancient bridge which was blown up by Mir Kasim in his retreat before the British forces.

336 m. Lakhisarai (p. 49).

346 m. Mokameh (p. 49).

(b) Tirhut.

Mokameh (p. 49) and Mokameh Ghat, through which the fast trains of the East India Railway run now, are the starting-points for the branches of the Bengal and North-Western Railway, all constructed within the last twenty-five years, and connecting the whole country between Oudh and the Teesta River with the S. bank of the Ganges.

4 m. Barauni. The main line of the Bengal and North-Western Railway runs E. from here to Katihar (112 m.), with branches to the river opposite Monghyr, Bhagalpur, and Sahibganj, and W. to Hajipur (54 m.), Sonapore (58 m.), and Chapra (87 m.). Sonapore is well known for its annual gathering of the planters of Tirhut, and for its fair, which was once the principal fair in all India for the sale and purchase of elephants.

The main line to Tirhut proceeds from Semaria Ghat to Samastipur

(38 m.), from which one branch runs *via* Darbhanga (23 m. N.) to Narkatiagunj (118 m. N.W.) and Bagha (26 m. W.), and thence to Gorakhpur (62 m. S.W.) in the United Provinces. Another branch runs from Darbhanga to Sakri (12 m. N.E.), Bhaptiahi (42 m. E.) and Partabganj Ghat (11 m. E.) in District Bhagulpur. There is a branch line from Sakri to Madhubani (11 m. N.) and thence to Rajnagar (6 m.) and Jainagar (13 m.) on the Nepal frontier. There is another branch line from Samastipur to Rusera Ghat (18 m. S.E.) and thence to Khagaria (35 m.). From Samastipur the main line to Tirhut runs to Muzaffarpur (32 m. N.W.), from where there is a branch to Hajipur on the main line of the Bengal and N.W. Railway (Cawnpore to Katihar), which again meets the Tirhut line at Buchhwara (between Semaria Ghat and Samastipur), and leaving it at Barauni (6 m. from Semaria Ghat) proceeds to Katihar (112 m. E.). From Muzaffarpur the distances by rail are 50 m. to Motihari (D.B.), 63 m. to Sagauli, and 77 m. to Bettiah (D.B.).

Darbhanga is the residence of the Maharaja of Darbhanga, who is of Brahman descent and one of the largest landlords in Bengal, Bihar and Orissa. The title of Raja was granted to the family in 1700 and of Maharaja in 1839. Sir Rameshwar Singh, the present Maharaja Bahadur, was a member of the Executive Council of the Province of Bihar and Orissa. The palace is a very fine building and the city (population 62,628) contains a number of very large tanks. The Government Offices are situated at Laheria-Sarai, which is within the Darbhanga Municipality and 3 m. by rail from Darbhanga station. There is a good D.B. at Laheria-Sarai. Samastipur and Madhubani are the headquarters' stations of the two subdivisions of the District,

and there are D.Bs. at both places. At Rajnagar there is a magnificent palace built by the present Maharaja. The building is one of the show places of the Province. There are two European Clubs, one at Laheria-Sarai and the other at Samastipur. Six m. by road from Waini on the railway line between Samastipur and Muzaffarpur is Pusa, where there is an Agricultural Research Institute, fully equipped with laboratories, museums, library and reading rooms. The building is a very fine and imposing one and was built at the initiative of Lord Curzon; Mr Phipps, an American gentleman, made a substantial donation towards its cost. There are a Club, and a commodious and furnished guest-house, at Pusa. The District abounds in old temples and places of historical interest, being identified with the ancient Hindu Kingdom of Mithila mentioned in Hindu mythological works.

From Sagauli a branch of 18 m. runs to Raxaul, the starting-point for Katmandu, the capital of Nepal. 16 m. N. of Bettiah, at Lauriya Nandangarh, is a Buddhist stone lat, crowned by a lion—almost the only isolated one in India which still bears a recognisable figure. (There is another column at Lauriya Araraj, S. of Bettiah.) The funeral mounds near the Asoka column at Lauriya Nandangarh are the only indisputably Vedic monuments yet identified in India.¹

From Sonapore the Bengal and N.W. Railway goes W. to Chapra, where one branch (a) runs to Manjhi Ghat and crosses the Gogra River there, and goes up to Jhusi (near Allahabad) *via* Ghazipur (where the Governor-General Lord Cornwallis died on 5th October 1805) and Benares Cantonment. From Aunrihar on this line a branch runs N.W. to Jaunpur and another from

¹ *Dir.-Genl. Archaeol. Ann. Rep.*, 1906-7, p. 119, *et seq.*

Phephua to Azamgarh (70 m.) and Shahganj (105 m.), on the O. and R. Railway. Jhusi is 197 m., Ghazipur 80 m., and Benares 126 m. from Chapra. (Owing to the opening of the Manjhi Ghat Bridge over the Gogra the mileage has been shortened. Before the construction of the bridge the traffic over the river was carried on by steamer, and according to a rule of the railway company the distance of the river from one bank to the other was taken to be 21 m. Since the construction of the bridge the actual distance is taken.) From Chapra another branch of the Bengal and N.W. Railway (b) runs N.W. up the left bank of the river to Gorakhpur (112 m. from Chapra) and Gonda (207 m.).

A branch line runs from here (Sonepore) to Palezaghat (6½ m.), from which a steamer crosses the Ganges to Dighaghat for Bankipore.

From Gorakhpur (named after a Hindu saint, Goraknath) a branch line runs N. to (40 m.) Uska Bazar, and goes on to Balrampur and Gonda (p. 375). This corner of the Tarai is of special interest as having been the undoubted seat of the birth of Buddha, and of many of the scenes connected with his life and death. What has been identified beyond all doubt of late years are (1) a stupa raised over part of the relics of Buddha at Pipráwá, 6 m. N. of Birdpur; and (2) the Lummini Garden, now called the *Rummin Dei*, where Buddha was born, 9 m. E. of Pipráwá. At the former was found by Mr Peppé, owner of the estate, in January 1898, a relic-casket inscribed, "This relic shrine of the Divine Buddha is that of the Sákyas," who received one-eighth of the relics and erected a stupa over them near Kapilavastu. At the latter was discovered a lat of

King Asoka, split down the middle, with an inscription that "here Buddha Sakyamuni was born." This column had been once surmounted by a horse, and Hiuen Tsang in his travels (629-645 A.D.) recorded that he saw at the birthplace a pillar which had been split by lightning, and which bore a horse. The bell-shaped capital of it has also been discovered, and in an adjoining temple a relief of the birth scene of Buddha, in which his mother, Maya-devi, stands erect holding the branch of a sal-tree, and the child stands on the ground at her right, a usual motive. Kapilavastu lay 10 m. to 15 m. W. of this garden, and the site is possibly marked by extensive ruins at Tauliva Kot, 9 m. N.W. of Pipráwá. Gorakhpur is the site of the workshops of the B. and N.W. Railway, and a centre for the recruitment of Gurkha soldiers for the Indian army, but has no features of architectural or historical interest in itself. It has no hotel. Gorakhpur to Fyzabad, 79 m.; Fyzabad to Gonda, 29 m.; Gonda to Berhampur, 29 m.

Kasia, 21 m. N. of "Tahsil Deoria" Railway Station, 12 m. S. of Padrauna and 34 m. E. of Gorakhpur (connected with all those by metalled roads) is merely a subdivisional headquarters, containing an Inspection Bungalow (permission to occupy can be obtained from the Chairman, District Board, Gorakhpur). 1½ m. to the W. of Kasia is the group of ruins which are believed to be the site of Kusinagara and the scene of the death of Buddha. The remains comprise six groups; the first consists of an isolated brick stupa some 50 ft. in height and overgrown with trees on the W. edge of the Ramabhar Tal, bearing the name of Devasthan or Ramabhar Bhawani: the second is a small mound of ruins to the S.W. of this stupa and a short distance to the

N.E. of the village of Anrudhwa. The third is the Matha Kunwar-ka-kot, about a mile W. of the Ramabhar stupa, comprising a temple with a colossal recumbent image of the dying Buddha, a large stupa, several monasteries and other buildings. The fourth is a colossal statue of the seated Buddha, called Matha Kunwar, about 400 yards S.W. from the kot, while the fifth consists of the remains of an enclosing wall and the last of a number of small earthen mounds and barrows, locally called Bhimawat, to the N. and E. of the kot. Some excavations made here in 1896, and further work done in 1904-7, showed that the stupa and temple of the dying Buddha were the nucleus of an extensive group of Buddhist buildings, comprising several large monasteries, a few small shrines and a great number of brick stupas of various sizes. These buildings belong to widely different periods, and those of later date have been raised on the ruins of earlier monuments. It also became evident that the history of this sacred site does not start from the erection of the Nirvana image, for the evidence of coins and other inscribed objects proves that several of the buildings date back to the Kushana and early Gupta epochs. In the fifth or sixth century a portion of the buildings was destroyed in a fire, possibly due to an invasion of the Huns. In the neighbourhood numerous clay seals inscribed "Convent of the Great Decease," have been found. The place is visited by a considerable number of Buddhist pilgrims mostly from Burma.

(c) Calcutta by E. Bengal Railway to Plassey and Murshidabad, 7-8 hrs.

Sealda station (p. 91).

24 m. Naihati.

46 m. Ranaghat junction.

62 m. Krishnagar.

Nabadwip, 7 m. by road from Krishnagar (by crossing the river Bhagirathi, or by the E.I. Railway from Howrah) is a celebrated seat of Sanskrit learning, and is also a great place of pilgrimage, being known as the "Benares of Bengal."

Santipur (on the Ranaghat-Santipur-Krishnagar Light Railway) is another ancient and important town, once famous for its fine muslins.

94 m. **Plassey**. There is a good bungalow 3 m. from the railway station, but travellers must make their own arrangements for meals and servants. There are no conveyances available from the station to the bungalow.

The bungalow is in the charge of the Executive Engineer, Nadia Rivers Division, Berhampore, Bengal; travellers should ascertain from him whether the bungalow will be vacant if they wish to spend a night there. There are no hotels in the Nadia District, but there are good D.Bs. at several places.

Plassey, so called from the Palás - tree (*butea frondosa*), is famous for Clive's great victory in 1757. The position of the British forces is marked by a mound near the river-bank and the old monument, and has now been more fully indicated on the ground at the instance of Lord Curzon, who has erected a second memorial.

The British force advanced from Chandernagore (p. 97) on 13th June, first to Katwa, and then across the Bhagirathi, between which and the Jalinghi channel of the Ganges Plassey was situated, and advanced against Suraj-ud-

daula's army at that place on the night of 22nd June. The battle opened the next day, 23rd, at 8 A.M., the French in the service of the Nawab facing the left of the British line, which touched the river, and the huge Indian forces of the Nawab forming a semicircle on the right front and right of that line. About midday a heavy downpour of rain occurred, and the British guns, having been protected during it, overpowered the advance made by the enemy a little later. The Indian forces then fell back to the entrenched camp; the Nawab was counselled by traitors to flee, and Mir Jafir separated himself in accordance with his understanding with Clive, who thereupon advanced and drove the French from their position, and afterwards took the entrenched camp, the enemy then offering but little resistance. The British force amounted to 3000, of whom one-third were Europeans—800 of these being English—and the Nawab's force to over 60,000. Captain Eyre Coote, who had been a strong supporter of the counsel to fight, which Clive ultimately adopted, distinguished himself greatly in the battle. The monuments for the Plassey battlefield are to be seen 3 m. from the Plassey Railway Station on the Ranaghat-Krishnagar-Murshidabad Branch of the E.B. Railway.

116 m. **Berhampore**, 7 m. below Murshidabad (D.B.) (population 26,142), the civil headquarters of the Murshidabad District. The Krishnaneth College here is affiliated to the Calcutta University. After the Battle of Plassey, as the factory house at Kasimbazar, where Warren Hastings resided, had been destroyed by Suraj-ud-daula, Berhampore was chosen as a site for a Cantonment, the barracks of which cost £302,270. It will always be notorious as the scene of the first overt act of mutiny in 1857, which occurred

on the 25th of February, when the 19th Regiment of Indian Infantry refused to receive their ammunition. Farther than this the mutiny did not go, but the Regiment was marched down to Barrackpore and disbanded there.

118 m. **Kasimbazar**. This was the British trading-station previous to 1757, after which it was moved to Berhampore. In the old cemetery are buried the first wife of Warren Hastings and her daughter. She was the widow of Captain John Buchanan, a victim of the Black Hole. There is also an old *Dutch Cemetery* here.

123 m. **Murshidabad**, the chief city of the district of the same name. This was the residence of the Nawab Nazims of Bengal, and was called after the great Nawab Murshid Kuli Khan,¹ the original name being Maksudabad, whence the Muxadabad of old records. It was a prosperous place in the last century, and owed much of its wealth to its being upon the line of trade from the interior of India to the European settlements on the Hooghly.

The population (according to the last (1911) census) of Murshidabad city is 12,669. Murshidabad was formerly famous for carved ivory, embroideries, etc. But now these trades are confined to a few families of carvers at Jiaganj and Khagra. An introduction to the Nawab of Murshidabad, through the Magistrate and Collector, who resides at Berhampore, will greatly facilitate the sight-seeing of the place.

¹ The well-known Subadars and Nawab Nazims of Bengal were Murshid Kuli Khan (known also as Jafir Khan, a converted Brahman), died 1725; Shuja Khan, died 1728; Alivardi Khan, died 1756; Suraj-ud-daula; Mir Jafir (see left column), and Mir Kasim (pp. 49 and 419). The famous Jain Seth family of Murshidabad which bore the title of Jagat Seth, or World Trader, and played a prominent part in the affairs of Bengal in the 18th century, resided at Mahimapur, 2 m. N. of Murshidabad.

The *Bera (Raft) Festival* is still celebrated here, in honour of Khwaja Khizr (the prophet Elias) on the night of the last Thursday of the Bengali month of Bhadra.

The *Palace of the Nawab*, which, with the surrounding buildings, enclosed by a wall, goes by the name of the *Nizamât Kila*, is situated on the river-bank about the centre of the town, and is in the Italian style, somewhat resembling Government House at Calcutta. It was built in 1837 at a cost of £167,000, the architect being General Macleod of the Bengal Engineers. It contains a circular Darbar-room, and a Banqueting-room 290 ft. long, with a picture of the Burial of Sir John Moore, by Marshall, at the W. end, and many other handsome apartments. The Armoury is well worthy of a visit. In the Library are some very rare MSS.

In the same enclosure with the palace is the *Imambara*, built in 1847.

Just outside the city is the *Katra*, containing the tomb of Murshid Kuli Khan. It was constructed on the model of the Great Mosque at Mecca, with two minarets 70 ft. high, but is now in ruins.

Near this, and 60 yds. from the road, is the *Great Gun*, the sister gun to that at Dacca. It is 17½ ft. long, with a girth of 5 ft. at the breech and a calibre of 6 in. This cannon, which had been left lying on the ground for many years, has been lifted up 5 ft. in the air by a pipal-tree which has grown up from a seedling beneath it. The inscription is in Persian, with the date 1637. S.W. of it, and 2 m. S. of the city, is

The *Moti Jhil*, or "Pearl Lake," a beautiful spot. Little remains of the palaces at one corner of it, but what remains is very picturesque. In the *Mubarak Manzil*, the pleasure-garden of the Nawabs,

a little to the E. of the Moti Jhil, there was kept the marble throne (now removed for the Victoria Memorial Hall at Calcutta) of the Nawab Nazim, by taking his seat on which, as Diwan, Clive notified to the Indian world in 1766 the cession of the Province of Bengal to the E.I. Company, under the farman of the Emperor of Delhi, Shah Alam, granted on 12th August 1765. The lake contains a good many crocodiles.

The *Khushbagh*, or "Garden of Happiness," the old cemetery of the Nawabs, is opposite to the Moti Jhil on the right bank of the river. It consists of three walled enclosures. The entrance to the outer one, planted with flowers and shady trees, is from the E., close to where some ruined ghats stretch down to the deserted bed of the Bhagirathi, which now flows in another channel. In the central enclosure are the tombs of the good Nawab Ali Vardi Khan and his nephew and son-in-law Suraj-ud-daula. They are almost level with the ground, and are covered with embroideries. The third enclosure contains a tank and Musafir Khana (Travellers' House). The Hira (diamond) Jhil, where the Mansurganj Palace stood, is near the *Roshanbagh*, also on the right bank of the river, opposite to the present palace.

The *Nizamât College*, or Nawab's Madrasa, which was formerly meant exclusively for the relatives of the Nawab, has now been amalgamated with the Nawab's High School under the name of the "Nawab Bahadur's Institution." This institution is open to the public.

The *Cemetery of J'afar Ganj*, about 1 m. to the N. of the Palace of Murshidabad, is that of the Nawabs Nazim appointed by the English, and contains a number of interesting graves. Opposite the gate is a handsome mosque.

The Murshidabad District is

noted for its *silk* industry. The villagers rear the silkworm at home, and sell the cocoons to the spinners, who export the skeins. Silk cloth and handkerchiefs are woven here on hand-looms.

From Murshidabad the railway runs on to

144 m. Lalgola Ghat, on the Ganges, whence there is occasional steamer service to Rajmahal (p. 414). A line from Godagari Ghat, on the opposite side of the river, runs to (195 m.) Malda (p. 415) and (251 m.) Katihar (p. 419).

(d) From Calcutta by Eastern Bengal Railway to Darjeeling by Ishurdi, Siliguri, and Kurseong.

Fares—Rs. 50, 7a. 6p., Rs. 25, 4a. Rs. 8, 5a. 9p. Mail train in 21 hrs.

The train starts from the Sealdah station (p. 91).

24 m. Naihati junction for Hooghly Junction Bridge (p. 97).

46 m. Ranaghat junction (D.B.). Branch E. for Jessore and Khulna and W. to Murshidabad (77 m.).

103 m. Poradaha junction station. Branch line E. to (52 m.) Goalundo Ghat, on the Ganges (p. 435).

124 m. Ishurdi junction, after crossing the Ganges by the new bridge, one of the longest bridges in the world, named after the late Viceroy, Lord Hardinge, who opened it. The view from it is very fine.

184 m. Santahar junction of line to Assam.

244 m. Parbatipur junction (R.), from whence a line runs E. to Kaunia, on the Assam mail route

(p. 441), and W. to (88 m.) Katihar (p. 419).

305 m. Jalpaiguri (R.), Civil Station of the Bengal District of the same name. Also a railway station on the Northern Section of the Eastern Bengal Railway, where both the Up and Down Darjeeling Mail touches. 12 hours' journey from Calcutta. Headquarters station of the Commissioner of the Rajshahi Division. Contains several European residents, mostly Government officials. The District is famous for its tea cultivation. There are 210 tea grants within the District, which produced 71,288,627 lbs. of tea during the season 1915-16.

Population of the District, according to the last census, 902,660, of whom 342 were Europeans. Climate fairly healthy during the cold weather but malarious during the rains.

Rainfall heavy. Annual rainfall 200 in. in some parts of the District and 125 in. in Jalpaiguri town itself. No hotels, but two D.Bs. furnished, one at the Headquarters station of the Alipur Duar Subdivision and the other in Jalpaiguri itself. District roads mostly unmetalled but sufficiently good to allow of motoring in the cold season.

The Bengal Duars Railway runs through the tea-garden areas, commencing from Lalmonir Hat in the Rangpur District and terminating at Madarihat. Branches run from Lataguri station to Ramshai, and from Mal station to Bagrakote, in the N.W. corner of the District.

The District includes several reserved forests in which rhino, elephants, and tigers are to be found. Elephants are especially plentiful, and considerable numbers are captured from time to time.

Exclusive of tea the ordinary crops of the District are rice, jute and tobacco.

328 m. Siliguri station (R., D.B.).

From this place to Darjeeling the journey is made by the *Himalayan Railway* on a gauge of 2 ft. The distance is 50 m., and the time occupied 6 hrs. Fares—

	1st Cl.	2nd Cl.	3rd Cl.
Single: Rs.	19 0 6	Rs. 9 8 3	Rs. 3 15 6
Return:	28 8 6	14 4 6	5 15 3

The line is constructed in the most substantial manner, with heavy steel rails (40 lb. to the yd.). The locomotives, specially designed by Messrs Sharpe & Stewart of Manchester, weigh 10 tons. The running speed of the trains, both up and down, is about 12 m. to 13 m. per hour, and travellers ascend over 1000 ft. an hour. It is worthy of note that this is the first work of the kind for which the capital required was raised entirely in India.

Travellers are strongly advised to have extra warm clothing at hand, as the transition of temperature from the plains to the mountains is sometimes very great. Spectacles or veils should be used against the dust and blacks from the engine, especially on the front seats of the open carriages, from which the best views are obtained. Only hand luggage can be taken into the carriages.

Siliguri was of special interest as the base of the expedition of 1904 into Tibet, Lhasa being 359 m. distant by the most direct route. A road leads from Siliguri to the Teesta Bridge, along which a railway line on a gauge of 2 ft. passes (p. 430), then rises steadily for two stages, and finally proceeds as a track to Gnatong (12,000 ft.), 83 m. from the base. Between Gnatong and Chumbi, 20 m. N., the Jeylap La Pass (14,400 ft.) is crossed, and 21 m. farther Pari Jong is reached. From here the direct trade route turns N.E. to Lhasa, which is about 200 m. distant. The route to Gyantse (13,200 ft.) crosses the Tang La

Pass (16,200 ft.); 42 m. farther on it crosses the Khari La Pass (16,500 ft.), and then the Khamba La Pass (16,800 ft.), and finally reaches the Chaksam Ferry in 323 m. Crossing the Tsangpo here the route goes up the Kyichu Valley to Lhasa, 359 m., 12,300 ft. above sea-level.

At Sookna station, 7 m. from Siliguri, the cars begin to ascend. The turns are very sharp, and at each a fresh landscape of surpassing beauty is opened out. The sides of the mountain are clothed with lofty trees and masses of jungle, with graceful tree-ferns in the ravines at the higher altitudes. At about 15 m. the cars pass round a spur which projects from the mountain, and the line runs on the edge of a precipice of 1000 ft. Farther up the line threads an extraordinary loop.

At (19½ m.) Tindharia (R.) the railway workshops are situated, 2822 ft. above sea-level. At (25½ m.) the Pagla Jhora is a large water-course, passing under the line from above. Much money has been spent in maintaining the line, as the hillside at this point is continually sinking down.

Breakfast can be taken at (32 m.) Kurseong station * (R., D.B.); there are tea-gardens here, with European managers and medical men residing on them. Kurseong is 5000 ft. above sea-level. Those who stray off the main paths in damp weather must take precautions against the leeches, which are numerous. At Kurseong the train halts half an hour while a late breakfast or lunch is served at the principal hotel. The old Punkabari road crosses the railway here, zigzags up the hill for nearly 2000 ft., and runs to Jor Bungalow, nearly parallel to the railway. This is one of the prettiest rides in the District. A little above Kurseong is the Jesuit Training

College; and near Kurseong are the Dowhill and St Helen's Schools for girls, and the Victoria School for boys: 2 m. from Kurseong is the Goethals School, established by the Irish Brothers.

At 40 m. is Sonada Brewery.

At 45 m. is Jor Bungalow, a collection of shops and huts on the narrow ridge or saddle which joins the Darjeeling spur to the Senchal Hill. At Jor Bungalow the road to Kalimpong branches off; there are also roads to the Darjeeling Golf-course, near Tiger Hill, to the Darjeeling Water-works, and to the Kattapahar and Jalapahar Cantonments. A short distance from Jor Bungalow is Ghoom station, whence the main road to the Nepal frontier starts. Near Ghoom station the Auckland road to Darjeeling joins the railway road. Ghoom station is the highest point on the railway, 7407 ft. About $\frac{1}{2}$ m. from it, just above the road to the Nepal frontier, is the Buddhist monastery of the Yellow Sect, constructed by Lama Sherab Gyantso, near which is the interesting Buddhist burning-ghat. From Ghoom, the train runs downhill to Darjeeling, which is reached within half an hour.

Rickshaws, dandies, and ponies can be hired just outside the Darjeeling Railway Station, and the Railway Company send up passengers' luggage to any part of the town. The rates are—Rs. 1, 8 as. for a rickshaw, Rs. 1, 4 as. for a dandy, 8 as. for a pony.

51 m. **Darjeeling**¹ (place or town of the thunderbolt). The beauty of its situation, upon a ridge high (about 7000 ft.) above the bed of the Great Ranjit River, the mountain-side scattered over with villas and bungalows, and the colossal background of Himalayan giants towering above it, together with

its moderate temperature, which neither exceeds 80° in summer nor falls below 30° in winter, tend to make Darjeeling a most agreeable residence, and have rendered it the most important sanatorium of Bengal. The temperature averages 2° above that of London all the year round.

From Darjeeling the highest **Mountain Peaks** in the world can be seen. Of these the loftiest is *Mount Everest*, 29,002 ft., visible from *Tiger Hill* (a 6-m. ride from Darjeeling) or from *Jalapahar*, the military Cantonment, though the distance is at least 120 m. The other peaks seen from Darjeeling or Jalapahar are—the magnificent array of the Kinchinjanga peaks (28,156 ft. high and 45 m. distant); to the W. of these, *Kabru* (24,015 ft.) and *Jannu* (25,304 ft.); to the E. of them, *Pandim* (22,017 ft.), with *Jubanu* (19,450 ft.) in front of it, and only 35 m. distant; and farther E. again the fine snowy peak of *Sinolchun* (22,270 ft.). Much of the surface of the highest peaks is too sheer for snow to lie upon it.

The view of unrivalled **Mountain Scenery** is unspeakably grand, and there are many views, and particularly that of Kinchinjanga, which impress the mind more and more every time that they are seen. Too often, unfortunately, clouds veil the highest peaks for days together, and there is no certainty of an unclouded view of Kinchinjanga in the cold weather, though such views are often obtained, especially after rain. When the clouds roll away, and display the bare granite summits, the eye looks over the lofty hills and across a vast chasm to the line of perpetual snow, about 17,000 ft. high, on the side of the stupendous Kinchinjanga. Above that rises a glittering white wall, and then it seems as if the sky were rent and the view is closed by enormous masses of bare rock. There is one special feature in the summit of

¹ Every one visiting Darjeeling should read Mr Douglas Freshfield's *Round Kinchinjanga*.

Kinchinjanga, and that is a lofty wall of granite of prodigious breadth, which appears to divide the summit into two portions. The effect is much more striking than if it were one great mass of snow. The extraordinary grandeur of this scene is heightened by the colouring given to it by the rising and setting sun or by the moon.

The District of Darjeeling (population 265,550) is divided into two portions—the N. is from 4000 ft. to 9000 ft. above the sea-level; the S., or *Morang*, consists of the spurs of the first range of the Himalayas and the plains thence to the District of Rangpur. Mountains which rise to between 12,000 ft. and 13,000 ft. divide it from Nepal. When Dr Campbell took charge, in 1839, there were only twenty families in the whole district; he remained Superintendent for twenty-two years, built the bazar, the cutcherry, and church, made roads, and established a convalescent depot at *Jalapahar*, the *Military Cantonment* S. of Darjeeling.

Darjeeling suffered severely from the earthquake of 1897 and the great storm of September 1899. On the *Mall* is the bandstand and a drinking fountain erected to the memory of Sir Ashley Eden, Lieutenant - Governor 1877-82. Near this are some pretty gardens and the *Eden Sanatorium* or *Convalescent Hospital*—a most conspicuous building, in the charge of the Clewer Sisters.

Above the Secretariat is *St Andrew's Church*, the foundation-stone of which was laid by Bishop Milman in 1870.

The old Church dated from 1843. There are tablets in it to George W. Aylmer Lloyd, C.B., Lieutenant-General H.M.'s Bengal Army, who died at Darjeeling 1865, aged 76. To his influence with the Raja of Sikhim Bengal is indebted

for this Sanatorium. Another tablet runs—

In Memoriam
CHARLOTTE, COUNTESS CANNING,
November 1862.

There are also a *Union Chapel* in Auckland Road, the Scotch Kirk (St Columba's), and nine other places of Christian worship. About $\frac{1}{2}$ m. beyond the Church is Government House, the large and comfortable residence of the Governor of Bengal, who spends May and June, September and October here. St Paul's and St Joseph's Schools are large establishments; there are also the Diocesan Girls' High School, the Loretto Convent School for girls, and Queen's Hill School for girls, besides several private schools. Near the Secretariat, and below the Victoria Pleasance Park, is a Museum containing fine collections of butterflies, moths, wasps, and ants.

The principal Bazar is in the centre of the town; on Saturdays and Sundays it is so thronged by picturesque natives from all parts—Lepchas, Limbus, Bhutias, Tibetans, Nepalese, Paharias, Bengalis, Kashmiris, and Europeans—that it is difficult to make way through them.

The top of the ridge above the church is called by the Buddhists *Dor-je-ling-gang*, or the hill of the thunderbolt town, known as the Observatory Hill, as it has a G.T. station preserved. It was once crowned by a Buddhist monastery, on the summit of the hill, constructed by Lama *Dor-je Legdenla*: there are remains of the hallowed associations of that monastery. At this holy site Buddhists offer prayers, ring bells, beat tom-toms, and make propitiatory offerings. The centre of the shrine is of stone, engraved with Buddhist gods and deities, surrounded by bamboo poles, from which flutter paper of different colours, and cloth prayer

flags printed with the horses of wind and prayers for luck. Some way below the ridge on the E. side is an interesting Buddhist *Chorten*, or chaitya, and a Buddhist monastery of the Red Sect of a distinctly Tibetan type in the picturesque village of the Bhutia Basti. It is worthy of a visit, not only on account of the temple, but also to see the hill people who inhabit the small village. The Birch Hill Public Park for picnics and views is a little over a mile from the railway station. The Victoria Falls are worth seeing, near Rosebank, the residence of the Maharaja of Burdwan.

The Botanical Gardens at Ran-garun contained an interesting collection of trees and plants peculiar to the Himalayas, but they have been given up, and the Botanical Gardens are now immediately below the Eden Sanatorium, on its W. side. Besides trees, there are collections of ferns and orchids.

The chief industry of the Darjeeling District is the cultivation and manufacture of *Tea*. The date of its commencement is 1856, when the first tea-garden was opened. There are now about 157, covering an area of some 54,024 acres actually under tea cultivation, and 78,227 acres which have been taken up by planters but not yet planted out. No less than one-third of the population reside on the tea-gardens. The manufacture and cultivation employ a labour force amounting (according to the census of 1911) to 53,000 coolies. The output is over 20,303,591 lb.

There is not much game to be had in the immediate neighbourhood of Darjeeling, but to the able pedestrian, the botanist, the lover of the picturesque, there are endless excursions.

(1) A good rider, or strong Alpine climber, may make an

interesting expedition of four days by Tonglu to Phallut, 49 m. in the direction of the snows. Coolies, laden, should do 12 m. a-day in the hills. The charge for a coolie is about 8 as. a-day; the load is from 40 lb. to 60 lb. The distances are to—

Jorpokri (7400 ft.), 12½ m.

Tonglu (10,074 ft.), 10 m.

Sandakphu (11,929 ft.), 14 m.

Sabarkum (11,684 ft.).

Phallut (11,811 ft.), 12½ m.

The views are magnificent. There is a good D.B. at each of these places except Sabarkum. Provisions and bedding must be taken. Passes for the bungalows at these places must be obtained (at 8 as. a-day for each person) from the Deputy-Commissioner's office between 11 A.M. and 4 P.M. A copy of his official Notice regarding the bungalows and other details should be obtained.

(2) Another very favourite and interesting excursion is to the *Bridge over the Great Ranjit River*, 6000 ft. below. A fair road has been made, by which the whole descent can be easily performed on ponies, the distance by the road being 11 m. The zones of vegetation are clearly marked, first by the oak, chestnut, and magnolia, which grow from 10,000 ft. to 7000 ft.; secondly, below 6500 ft., by the *Alsophila gigantea*, or tree-fern (to be seen from the Himalayas to the Malayan Peninsula, in Java and Ceylon); thirdly, by the Calamus and Plectocomia palms (6500 ft. is the upper limit of palms in Sikhim); fourthly, by the wild plantain, which in a lower elevation is replaced by a larger kind. At 1000 ft. below Darjeeling is a fine wooded spur called Lebong, where English fruit-trees flourish, and the tea-plant also succeeds admirably: at Lebong is the Cantonment for European soldiers, with a large parade ground, also used as an arena for gymkhanas. Below is

the village of Ging, surrounded by slopes cultivated principally with tea, also with rice, maize, and millet. Above the Ging village there is a Buddhist monastery of the Zok-chen-pa Red Sect, a branch of the great Pamiongchi monastery of Sikhim.

At 6 m. from Darjeeling are the Badamtam Tea-garden and a R.H.; at 2 m. below again, a view may be had of the beautiful suspension bridge over the Ranjit River, which leads to Sikhim.

At 10 m. from Darjeeling is the *junction of the Ranjit with the Rangnu*. The Ranjit's foaming stream runs through a dense forest. From the opposite direction the Rangnu comes tearing down from the top of Senchal, 7000 ft. above. Its roar is heard and its course is visible, but its channel is so deep that the stream itself is nowhere seen.

Farther down is the *junction of the Ranjit with the Teesta*, which is sea-green and muddy, while the Great Ranjit is dark green and very clear. The Teesta is much the broader, deeper, and more rapid. This expedition will take two days.

If time permits and the weather is favourable, it is well worth following the Teesta Valley down to Siliguri by rail (see p. 426) instead of returning by train from Darjeeling.

(3) Senchal, 8610 ft., is clearly seen from Jalapahar, and is about 6 m. off. It used to be a depot for European troops, but was abandoned on account of its climate and the effect on the troops. The water for Darjeeling is taken in pipes from the Senchal springs. An expedition may be made to it, starting early in the morning. It is comparatively easy of access, and from Jalapahar the path along the ridge of the mountains may be seen. This path abounds in rare and beautiful plants, and traverses

magnificent forests of oak, magnolia, and rhododendron.

Nearly thirty ferns may be gathered on this excursion in the autumn. Grasses are very rare in these woods, except the dwarf bamboo.

(4) Darjeeling is lit by electric light, and an interesting trip may be made to the electric power station, 3000 ft. below the town, on the W. side of the spur. The distance is about 5 m., and a tea-garden is passed through on the way.

From Darjeeling any one looking at the snowy range of the Himalayas to the N. cannot help seeing Sikhim, with its lower ranges of mountains rising irregularly to the greater heights. Some account of this interesting country and its attractions, and the routes available, may be useful to travellers.

Sikhim.

The Native State of Sikhim (Sukhim or "New-house," in Tibetan, Den-jong, or "the rice country"), situated to the N. of the Darjeeling District, has an area of 2818 sq. m., and in 1911 had a population of 87,920 persons—chiefly Brahmanic Hindus (58,675) and Buddhists (28,915), also 285 Christians and 44 Musalmans. Gangtok (5800 ft.), the residence of the Maharaja and the Political Officer, is the capital. The present Maharaja Tashi Namgyal, C.I.E., is the youngest son of Maharaja Sir Thutob Namgyal, K.C.I.E.; he succeeded his half-brother, Maharaja Sidkeong Namgyal, C.I.E., in December 1914: he is unmarried, and twenty-four years old.

There are, in Sikhim, only 315 villages and 16,733 occupied houses. The high mountains, as viewed from Darjeeling, have been described above (p. 427), but the

lower hills also contain much beautiful scenery, and possess features of special value for all who take delight in Alpine travel, or are interested in the pursuit of botanical studies, butterflies, and some branches of zoology (reptiles, birds, mammals). "Sikhim¹ is the most humid District in the whole range of the Himalayas because of its proximity to the Bay of Bengal and direct exposure to the effects of the moisture-laden S.W. monsoon. . . . It is estimated to contain about 4000 species of flowering plants under 160 natural orders; also 250 ferns and their allies, of which eight are tree-ferns." It has also 660 recorded species of orchids, 20 of palms, and about 23 of bamboos. The flora and the trees vary according to the three zones—the subtropical from 700 ft. to 1500 ft. elevation, the temperate from 1500 ft. to 11,500 ft., the Alpine from 11,500 ft. to 18,000 ft. Butterflies are extremely abundant, distributed among about 600 species; the moths are estimated at 7000 species.

The 44 monasteries present objects of interest to students of religions and lovers of the picturesque. Lamaism, or Tibetan Buddhism (a mixture of orthodox Buddhism with a preponderating amount of mythology, mysticism, and magic), is the State religion of Sikhim, professed by a large number of the inhabitants. The Lamas, numbering about 1200, constitute the clergy. The principal monasteries are—(1) Sangachelling; (2) Pamiongchi; (3) Tashiding; (4) Phodang, at Tumlong; (5) Rhumtek, 8 m. from Gangtok. The country contains also many *gompas*, some of which are retreats for isolated monks, while others are temples for the villages. Many *chortens* (cenotaphs in memory of Buddha or canonised saints) are met with. and *men-*

dongs, or low prayer-walls, faced with blocks bearing the mystic sentence *om mani padme hum*.

The abnormal rainfall of Sikhim, amounting to 30 in. annually in the dry upper valleys, but reaching to 250 in. and over in many other parts, renders travelling arduous and disagreeable during the monsoon months; though the rain-water runs off the sloping roads and paths, the rivers are swollen (as they also are when the higher snows melt) and the atmosphere is laden with clouds and moisture. Travelling in Sikhim should therefore be undertaken before and after the rainy season, except by people wishing to climb the snow-mountains; for them the rainy season is the best, and, indeed, the only time.

The main route into Sikhim is *via* Siliguri and the cart-road alongside the course of the Teesta River to Rungpo, and up the course of the Rani River to Gangtok. The Darjeeling Himalayan Railway extension from Siliguri has been completed as far as Teesta Bridge below Kalimpong.

From Darjeeling Sikhim can be entered by four routes—(a) to Phallut (already mentioned) and on to Chiabhanjan, thence Northwards to Yampung, Jongri, and the snow-line, or Eastwards to Dentam and the monasteries (1, 2, 3, above); (b) by the iron suspension bridge over the Rummam River, below Darjeeling, to Chakang, N. of and near to that river, and to the same monasteries; (c) by the iron suspension bridge at Manjitar, over the Great Ranjit, to Namchi, Temi, Gangtok, and on to Tumlong; (d) by Pashoke and the Teesta suspension bridge to Kalimpong (a small town, with an English Church), Rissum, Pedong, and Rhenok, where the road bifurcates, one leading N. to Pakhyong and Gangtok, the other N.E. to Chumbi, in Tibet, *via* Sedonchen, Lingtu,

¹ *Imperial Gazetteer*, i, 166.

and the Jeylap Pass. From the Jeylap the other passes—the Nathu-la, Yakla, and Cho-la—into Tibet can be visited; the scenery is grand.

From Gangtok the track is continued Northwards to Toong and Cheungtung, where it divides into the Lachen and Lachung valleys. The path up the Lachen leads to Tangu, Giau Gong, and the Kongralama and Serpuba passes into Tibet; by the Lachung to the Ghora-la and Donkya-la.

These routes are further indicated in the following statement. On them all there are D.Bs. in charge of *chaukidars* (custodians). There are four beds in each bungalow, and the simplest furniture, but no food-supply can be relied on (though chickens, eggs, and milk may be obtainable), so that provisions and bedding must invariably be taken for excursions into Sikhim. The country is so sparsely inhabited, and the traveller is so dependent on coolies for transport, that no journey should be undertaken in Sikhim without previous communication with the Deputy-Commissioner of Darjeeling or the Political Officer in Sikhim (address Gangtok, *via* Siliguri).

ROUTES INTO AND IN SIKHIM.

(D.B. = Dak Bungalow,

My. = Monastery.)

Route I.

There is a railway as well as a cart-road from Siliguri to the Teesta Bridge, and from the Teesta Bridge to (a) Gangtok, (b) near Pedong.

Siliguri (D.B.)	16½ m. to
Kalijhora (D.B.)	5½ "
Berrik (D.B.)	4½ "
Riang (D.B.)	5½ "
Teesta Bridge (D.B.)	

Route II.

Darjeeling	14 m. to
Lopchu (D.B.)	4½ "
Pashoke (D.B.)	4 "
Teesta Bridge (D.B.)	3 "
Melli (D.B.)	11 "
Rungpo (D.B.)	5 "
Sankokola (D.B.)	7 "
Shamdong (D.B.)	12 "
Gangtok (D.B.)	13 "
Raiotdong (D.B.)	11 "
Singhik (D.B.)	9 "
Toong (D.B.)	5 "
Cheungtung (My., D.B.)	

From—

Cheungtung (My., D.B.)

(a) 12 m. to Lamtang (D.B.),

13 " *Tangu (D.B.),

(b) 10 m. to *Lachung (D.B.),

13 m. to Yumtang.

From Gangtok to Tumlong (and no farther), 9 m.

* Tents are required beyond Tangu and Lachung.

Route III.

Teesta Bridge (D.B.)	10 m. to
(7 m. by bridge-path)	
Kalimpong (D.B.)	12 m. to
Rissum (D.B.)	7 m. to
Labah	2 "
Pashiting (a forest bungalow here).	Branch to the Duars.

From—

Kalimpong (D.B.)	12 m. to
Pedong (D.B.)	5 "
Rhenok (D.B.)	9 "
Pakhyong (D.B.)	10 m. to
Gangtok (D.B.)	Junction Road to Gangtok.

From—

Rhenok (D.B.)	3 m. to
Ari (D.B.)	4 "
Rongli (D.B.)	8 "
Sedonchen (D.B.)	9 "
Gnatong (D.B.)	5 "
*Kupup (D.B.)	10 "

* 16 m. to Chumbi.

Changu (D.B.) .	12 m. to
Champhang (D.B.) . 11 m. to	} into Tibet.
Chumbi (D.B.) 131 "	
Gyantse.	

From—

Changu (D.B.) .	9 m. to
Karponang (D.B.) .	9 "
Gangtok (D.B.).	

Route IV.

Darjeeling .	12½ m. to
Jorpokri (D.B.) .	10 "
Tonglu (D.B.) .	14 "
Sandakphu (D.B.) .	12½ "
Phallut (D.B.) .	17 "
Dentam (D.B.) .	10 "
Pamiongchi (My., D.B.)	10 "
Rinchinpong (My., D.B.)	11 "
Chakang (D.B.) .	13½ "
Darjeeling.	

(There is a direct road from
Dentam (13 m.) to Rinchin-
pong (My., D.B.).

Alternative Route.

Pamiongchi (My., D.B.)	10 m. to
Keuzing (D.B.) .	10 "
Temi (D.B.) .	10 "
Namchi (My., D.B.) .	7 "
Manjitar (D.B.) .	3 "
Badamtam (D.B.) .	7½ "
Darjeeling.	

From—

Temi (D.B.), (by an iron suspension bridge over the Teesta) .	11 "
Song (D.B.) .	14 "
Gangtok.	

Europeans visiting Sikkim are required to carry a pass, and unless provided with a pass will not be allowed beyond the Darjeeling frontier. Passes are issued by the Deputy-Commissioner, Darjeeling.

The bungalows are available only to persons provided with passes, issued, for the Sikkim bungalows, by the Political Officer in Sikkim or by the Deputy-

Commissioner of Darjeeling; for the Darjeeling bungalows, by the Deputy-Commissioner of Darjeeling; for certain Darjeeling bungalows, by the Executive Engineer, P.W.D., Darjeeling.

A separate pass must be obtained for each occupant for each bungalow, whether going or returning.

Fees.—Eight annas for each person for occupation during the day, up to a maximum charge of Rs.8. One rupee per night for each occupant. (For Badamtam, Senchal, Rangarun, 4 as. each by day; maximum, Rs.4.)

Fees are payable in advance to the Deputy-Commissioner or Executive Engineer, on the submission of the application for the pass.

Government officers on duty are allowed to occupy the bungalows in the Darjeeling District free of charge. In Sikkim they are charged full rates if they occupy for more than seven days.

Details as to *Fees, Furniture, Provisions, Servants, Tours, and Rates* are fully set out in the official Notice regarding travellers' bungalows in Sikkim and the Darjeeling District, obtainable from the Deputy-Commissioner of Darjeeling.

ROUTE 24.

I. EASTERN BENGAL.

II. ASSAM.

CALCUTTA to Goalundo; (1) Narainganj, Dacca, (2) Chandpur, Chittagong, Cachar, Sylhet, Gauhati, (3) Cooch, Behar, Dhubri, Gauhati.

Assam was under the Lieutenant-Governor of Bengal until, in 1874-5, the Districts of the Brahmaputra Valley and the adjacent hills, with Cachar and Sylhet, were constituted a separate Province under a Chief Commissioner. It so remained until, on the partition of Bengal from 16th October 1905, the new Province of Eastern Bengal and Assam was created, with a population of 31 millions (18 millions being Muhammadans) under a Lieutenant-Governor. This arrangement held only until, on 1st April 1912, the Eastern Bengal Districts were rejoined to Bengal (to form the Governorship of Bengal), and the old Province of Assam was reconstituted, with twelve Districts and one Native State, under a Chief Commissioner (lately Sir Archdale Earle). The area administered by him covers a surveyed area of 61,723 sq. mi., and the unsurveyed country of the Eastern Angamis and Semas, which was added to the Naga Hills since 1901, a tract containing 40,000 people. The total population of the present Assam Province in 1911 was 7,059,857, all of whom are in British Districts, except 346,222 persons in the Manipur State. This population included 3,838,769 Hindus; 1,901,032 Muhammadans; 66,562 Christians; and 1,239,280 Animists.

“ Assam owes its importance to its situation on the N.E. frontier of India. It is surrounded by mountainous ranges on three sides—on the N. are the Himalayas, shutting off the table-lands of Bhutan and Tibet; on the N.E. is a series of hills which form a barrier between the Upper Brahmaputra Valley and the more or less independent Mongolian tribes who live W. of the boundary of China; on the E. and S. lie the hills which march with those forming the limits of the Province of Burma and the State of Hill Tippera; on the W. lies the Province of Bengal, on to the huge plains of which debouch the two valleys of the Brahmaputra and the Surma, which form the plains of Assam. These two valleys are separated from each other by the Assam range, which projects westward from the hills on the Eastern border. The physical features of the Province are full of variety. The valley of the Brahmaputra, otherwise known as the Assam valley, on the N. is an alluvial plain about 450 m. in length and 50 m. in average breadth, so that one never loses sight of the hills on either side. Of the two Districts of the Surma Valley, Cachar forms the Eastern angle, and contains one subdivision in the hills, while Sylhet is so wide and flat that, except in the extreme N. and S., the appearance of the country recalls the plains of Bengal. Mongolian influences are present everywhere, except in the greater part of Sylhet. Throughout the plains communication was, and is still to a great extent, mainly by water in the rains, when the flooded Brahmaputra and Surma rise and cover the lowlands. Hindus are twice as numerous as Muhammadans, who are mostly found in the Surma Valley, and more than three times as numerous as Animists, of whom nearly a million and a quarter were censused, mainly in the hills and the

Brahmaputra Valley. In language there is perhaps more diversity on the Eastern frontier than exists in any other part of India, and the Khasis possess a tongue the nearest affinities of which are as far distant as Cambodia and Assam. The discovery that the tea-plant was indigenous in both valleys has led to the exploitation of their waste areas by European capital, and it has been truly said that Dibrugarh, at the upper end of the Brahmaputra Valley, is more like a colony than India in its large European population and the extent of their industrial enterprise." (Assam Report, 1912, of the census of 1911.)

A combined visit to Eastern Bengal, the Sylhet and Cachar Valleys and Assam is best made by the route by E.B. Railway to Goalundo, and thence by (1) steamer to Narainganj; or (2) Chandpur routes below. A visit to Assam only, or a combined visit to Darjeeling and Assam, will be more comfortably accomplished by the E.B. Railway route by Parbatipur junction, Kaunia, Gitaldaha, and Gokalganj, route (3). The "through" river services, once the only means of approach to all ports of Assam, have now been superseded by the railways for the purposes of all ordinary travellers.

(1) Calcutta to Dacca *via* Goalundo and Narainganj.

[For the journey from Calcutta to Foradaha junction station (103 m.) see p. 425.]

150 m. Goalundo Ghat station, the terminus of the Eastern Bengal Railway, is about 10 m. S. of the junction of the Ganges and Brahmaputra Rivers, which below this point are called first the Padma,

and then the Meghna River, and form a body of water so wide across that in the centre the low shores are scarcely visible.

Goalundo has no permanent buildings, as the river-banks at this point have for many years past changed constantly, and the river floods have destroyed everything that has been built.

"About £130,000 had been spent upon these protective works, and it was hoped that engineering skill had conquered the violence of the Gangetic floods. But in August 1875 the solid masonry spurs, the railway station, and the magistrates' court, were all swept away, and deep water covered their site. A new Goalundo terminus had to be erected 2 m. inland from the former river bank" (Hunter).

There are plenty of native boats at Goalundo, and a regular daily service by steamer in 6 hrs. to 9 hrs. to Narainganj (104 m. for Dacca); and to *Chandpur* for *Chittagong* and *Assam* by railway, in 7 hrs.

Dacca (23° 43' N. and 90° 24' E.), a city with a population in 1911 of 108,152, lies on the N. bank of the Buriganga River, along which it extends for nearly 4 m. from beyond the Lal Bagh on the W. to the suspension bridge over the Dholai Khal (Creek) on the E., presenting an imposing river frontage. From Calcutta it is 254 m. distant, the journey being done partly by rail and partly by river steamer, or by steamer all the way *via* the Sunderbans, a trip worth taking. The city is also connected by rail through Mymensingh with Darjeeling and Assam.

Along the central portion of the river front runs a fine promenade, called the Buckland Bund, after Mr C. T. Buckland, who was Commissioner, 1862-67. Behind it are the palace of the Nawabs of Dacca, on the site where the French factory stood, and the town resid-

ences of many of the chief zamindars of the district. Here, too, within a short distance, are many important buildings, the Bank, the Commissioner's office (which was once the European Club), the Collegiate School (formerly Dacca College), on the site of the English factory, the Courts and Government cutcherries, the English Church, the Baptist Mission buildings and the Roman Catholic Cathedral. At the Sadar Ghat on the Buckland Bund stands an ancient cannon. Tradition has it that this is a male gun, "Kale Jham Jham," whose mate, Bibi Mariam, lies at the bottom of the river, and calls to him every night, and thus causes the mysterious sound known as the "Barisal guns." A broad road runs due N. from the Sadar Ghat to the new Civil Station of Ramna. The Bara (great) Katra, a large building of fine architecture, stands on the bank of the river, which it faces with a striking front. It was built in 1644 by the Dewan Mir Abdul Kasim, and seems to have been intended for a royal residence. From the roof an interesting view of the city and river is to be had. About 100 yds. E. of this is the Chhota (little) Katra, built by Shaista Khan in 1663.

S.E. of these buildings is the Mitford Hospital, on the site of the Dutch factory. A short distance to the N.W. is the most picturesque monument of Dacca, the Lal Bagh fort, built by Muhammad Azim, third son of Aurangzeb, when Viceroy of Bengal, in 1678, but left unfinished. Aurangzeb afterwards gave it as a *Jagir* to Shaista Khan, whose daughter, Pari Bibi, lies buried in a fine tomb within the fort. Here, in 1857, some companies of Indian Infantry, having become disaffected, were attacked and defeated by sailors of the Indian Navy, helped by the Dacca Volunteers.

Amongst many other interesting monuments at Dacca are: the

Husani Dalan, built by Mir Murad in 1642. Here the Muharram is celebrated annually with intense fervour. The *Temple of Dhakeswari*, the most famous Hindu shrine in these parts. The *Sat Ganbaz* (seven domes) mosque, some 6 m. W. of Dacca, said to have been built by Shaista Khan, with the Sat Gumbaz Mausoleum 100 yds. E. of it, containing two tombs, where two of his daughters are said to be buried.

When the Generals of Akbar conquered Eastern Bengal in 1575, the capital of the province was at Sonargaon, some 20 m. E. of Dacca, where there are still many interesting ruins. In the reign of Jahangir the capital was transferred to Dacca, by the Governor, Islam Khan, grandson of Shaikh Salim Chishti. The English factors settled here first in 1666, and not long afterwards were subjected to great oppression by the Governor, Shaista Khan, nephew of the Empress Nur Jahan: a hundred years later their countrymen were masters of the whole country. Their factory was near the old Government College. In 1704 the Court moved to Murshidabad, and the glory of Dacca grew dim, until in 1905 it revived, but only for a few years, when Dacca became the capital of the new province of Eastern Bengal and Assam, and European officials gradually left the old town for the new quarter of Ramna, where many fine buildings, including two Secretariats and two Government Houses, of which the second has never been used, were erected. Ramna, N. and W., of the old city, is a breezy open place, with many trees, and a breeze which rarely fails to blow. There is a spacious Maidan, once a race-course, in gayer days, now providing a golf-course and polo ground and tennis courts. The new Club is to the N. of the Maidan, Dacca College to the S.

In 1912, at the repartition, the

new province disappeared, and Dacca is no longer a capital, but only the largest Civil Station in Bengal outside Calcutta. It has the atmosphere of a romantic past. Its bazars are very good and very interesting. The shell bracelets of Dacca are famous, and may be seen here in the making. The flimsy muslins "*abrawan*," "*bafihawa*," "*Shabnam*," "running water," "woven air," "evening dew," once so celebrated, are now not often produced, and the art of weaving them seems to be dying out. Of other less costly muslins there is still a considerable output. Silver filigree work of good quality is done, and there are some promising new industries, such as the making of buttons.

At Kurmitola, 10 m. distant by road, a forest begins, which stretches N. for over 100 m. to Tangail. Leopards may frequently be had within 10 m. of Dacca, and tigers a little further off, but the country is not suitable for pig-sticking. Ducks are plentiful in parts, but snipe are very scarce.

In the rains much of Dacca District is under water. **Narayan-ganj**, on the Lakhya, 10 m. or 12 m. off, is the port of Dacca, and has a large trade, particularly in jute, for which it is the great mofussil centre. Near it there are some old forts of Mir Jumla's, and opposite the town, on the E. bank of the Lakhya, the celebrated shrine of Kadam Rasul.

The population of Narayan-ganj in 1911 was 27,876. There is a considerable number of European residents, and several European firms, engaged in the jute trade. A Subdivisional officer is stationed here, and, when the projected division of Dacca District into two is accomplished, Narayan-ganj will be the headquarters of the new District. Munshiganj is the headquarters of another Subdivision. The Idrakpur fort, built by Mir Jumla in about 1660, is still in

good condition, and the Subdivisional officer's residence has been built on the roof.

Dacca has no hotel proper, but the Dak Bungalow, close to the railway station, is good, and provides comfortable quarters for travellers. The city is by repute a healthy place, being almost free from malaria, and fortunate in its seldom-failing breeze.

The railway from Dacca proceeds N. to

76 m. **Mymensingh station** (R.) and

130 m. **Jaganathganj**. The Assam steamer, leaving Goalundo in the early morning, reaches Jaganathganj at 11 P.M. the same day.

From Singhjani (108 m. from Dacca on the Dacca-Mymensingh and Jaganathganj line) a new railway line to Fulchari is under construction, and will be opened shortly. A new railway is shortly to be opened from Bhairab Bazar in the Kishoreganj Subdivision of the Mymensingh District to Netrokona, with stations at Kishoreganj, Gouripur, and Netrokona. Mymensingh is the most populous District in India, containing 4,526,422 souls. It is noted for its production of a quarter of the total jute crop grown in the jute-producing Provinces.

- (2) Calcutta by Goalundo and Chandpur to Chittagong and to Gauhati in 44 hours by Assam-Bengal Railway.

Fares—Rs. 74 and Rs. 10.

There is a regular service of steamers from Goalundo in connection with the mail train from Calcutta to Chandpur. There is also a direct steamer communication from Dacca in 5½ hrs. D.Bs. at Chandpur and Comilla are

available; the accommodation therein is reasonably sufficient. From Chandpur the Assam-Bengal Railway runs to

32 m. **Laksam Junction** station. Here the S. branch of the line runs to Chittagong.

81 m. **Chittagong** station, the S. terminus (population 28,766 in 1911; annual value of import trade, 152 lakhs, and of export trade 632 lakhs). It is the chief town of the Division and District of the same name, which came into British possession by cession in 1760. It was once part of the Hindu kingdom of Tippera, was burnt by the Portuguese in 1538, was recaptured by the Mughals from the Raja of Arakan in 1668, and was the cause of the First Burmese War. The port, 12 m. from the sea up the Karnaphuli River, is a very good one, and its trade is rapidly increasing. The Port Trust income is Rs.189,000, the Pilotage Fund income Rs.38,000. There are eleven tea-gardens in the District, with a total of 4270 acres under tea. The passenger steamers are—the B.I.S.N. Company and Asiatic Steam Navigation Company to Rangoon; the Calcutta Retriever Flotilla Company to Cox's Bazar; the I.G.S.N. and Railway Company to Barisal.

From **Laksam** junction the Bengal-Assam Railway runs N. to 15 m. *Comilla*, 44 m. *Akhaura*, 124 m. *Kulaura*, and 171 m. **Badarpur**, and from the last by a branch line 18 m. to

190 m. **Silchar** (D.B.) (population, 8785), headquarters of the Cachar District, annexed in 1830. The wild tea-plant was discovered here in 1855. From *Kulaura* a branch line has been constructed to **Sylhet** (D.B.) (population 14,457), on the lower valley of the Surma River, so that this place is now reached by rail. There is also a steamer service to Fenchuganj from Narayaganj. There are also steamer service from Marauli to

Chhatak (D.B.) throughout the year, and a feeder and steamer service from Chhatak to Sylhet during the rainy season. Both Sylhet and Silchar have suffered severely from earthquakes on various occasions.

From **Akhaura** a branch line runs S.W. to Bhairab Bazar, with bifurcation from that place to **Dacca** and **Mymensingh**.

From **Badarpur** the Bengal-Assam Railway continues N. to 287 m. **Lumding Junction**, from which place the line runs (112 m.) to Gauhati and to (494 m.) **Tinsukia Junction**.

Nowgong (in Assam) is 662 m. from Calcutta and 119 m. from Shillong. The ordinary means of reaching Nowgong from Calcutta for passengers is by Eastern Bengal State Railway to Gauhati *via* Amingaon, thence by Assam-Bengal Railway to Chaparmukh, thence by road 16½ m. to Nowgong. A railway from Chaparmukh through Nowgong town to Silghat will shortly be completed.

The method of transit for heavy packages is usually by steamer all the way from Calcutta to Silghat on the Brahmaputra River, thence by road (32 m.) to Nowgong.

There are D.Bs. both at Nowgong and Silghat.

Gauhati (D.B.). Gauhati,¹ once the capital of the Ahom (Shan) kings, is the headquarters of Kamrup District and of the Assam Valley Division and formerly of the Assam Administration. It possesses a First-grade College, a Law College, and numerous schools. The place was almost destroyed by the earthquake of 1897, but no signs of this catastrophe are now visible. The situation of it, on the S. bank of the Brahmaputra, which here resembles a lake with mountains and wooded shores, is very pretty. In

¹ Any one specially interested in Assam should consult Sir E. A. Gait's History of the country.

the middle of the river are the island and temple of Umananda, and on the N. bank, on a projecting ridge, is another temple on the top of a hill approached by winding flights of steps.

Gauhati is at present the junction of the Assam Valley branch of the Assam-Bengal Railway and of the Eastern Bengal State Railway connecting it with Calcutta. The population of the town of Gauhati is 12,481. It has an area of 2.95 sq. m., and is the principal centre of trade in Lower Assam. The celebrated temple of Kamakhya, on the Nilachal Hill, some 3 m. below the town, is the resort of numerous pilgrims from all parts of India.

There is a very good road (63 m.) from Gauhati S. to Shillong.

A survey is being made for a narrow-gauge railway to Shillong. River steamers call daily, *en route* up and down stream.

Shillong, * the summer headquarters of the Assam Administration, is situated in lat. $25^{\circ} 34'$, long. $91^{\circ} 33'$, at a height of 4900 ft. above the sea. It is connected by motor services with the railway stations at Pandughat and Gauhati, and the journey from Calcutta now takes only about 26 hrs. Cars for luggage and servants accompany the first-class passenger car. Fares (motor, which does the 69 m. from Pandughat in 5 hrs.)—Rs. 22, first class; servants, Rs. 10; luggage, Rs. 3 per maund. The charge for advance luggage is Rs. 3 per maund to Pandughat or Gauhati. The road from Gauhati runs through tropical forest, rolling grassy downs, and great pine woods; the journey is charming. Shillong (population 13,577) is tastefully laid out amongst the pine woods that clothe the hill from which it takes its name. The surrounding country is not unlike the lowlands of Scotland, and there are an

excellent golf-course, a fine polo ground and race-course, and opportunities for riding and driving which cannot be enjoyed at Himalayan hill stations. The average rainfall is 81 in. The temperature in the height of summer rarely reaches 80° F. The best accommodation is to be obtained at La Chaumiere (where an introduction is required); terms: Rs. 250 a month for a single person; Rs. 450 for a married couple. The Pinewood Hotel charges Rs. 8 to Rs. 10 for a short stay, and from Rs. 225 monthly, according to the accommodation required: there are also a few boarding-houses and a D.B.

Shillong is connected by a motor road with Cherrapunji (4455 ft., D.B.). This place is famous for the highest annual rainfall in the world—426 in.; in 1861 an extraordinary record amounted to 905 in., of which 366 in. fell in July alone. From Cherrapunji a steep road leads in 10 m. to Theria, in the Surma Valley, and so to Sylhet. Motor-car available on application to the General Manager, Gauhati-Shillong Motor Transport Company, Shillong, for a visit to Cherrapunji.

The railway from Lumding junction continues N.E. past Manipur Road (Dimapur), Titabor, and Moriani (from which two short branches run to Jorhat and to Gosainganj on the Brahmaputra), and then 104 m. more to (494 m.) Tinsukia, whence one branch of 27 m. leads to Dibrugarh, surrounded by tea-gardens, and another, dividing at Makum, runs N. to Talap, thence runs N. to Saikhowaghat, on the river, and S. to Margherita, called after the Queen of Italy, where the Assam coalfields are situated; the output of coal was, in 1916, 282,652 tons, paying a royalty of Rs. 34,495. Five m. farther S. the line ends at Ledo. It is under contemplation to construct a railway from here

down the Hukong Valley to Mogaung (p. 631).

Dibrugarh (population 14,563) is the headquarters of the Lakhimpur District (population, 468,989), and of the Assam Valley Light Horse. The river steamer from Goalundo, calling at other stations on the Brahmaputra, reaches Dibrugarh as well as the railway.

From Dimapur the main road to Manipur (134 m.) runs S. not far from the old (now abandoned) fort of **Samaguting** and **Kohima** (46 m.). The road is metalled throughout and fit for light motor traffic except after heavy rain; it is supplied with R.Hs., but provisions must be taken. Cart rates, for carts carrying 10 maunds each, are Rs.18-24 for up-journey, and Rs.24-30 for down journey. Carts take 10-12 days.

Imphal, the capital of the State of Manipur, lies in a lovely valley, which is some 60 m. long and 30 m. wide, at a height of 2600 ft. above sea-level. It is reached by cart-road from Manipur Road station on the Assam-Bengal Railway. The distance is 134 m., and there are twelve well-furnished R.Hs. at convenient distances. At Manipur Road there are a D.B. and small bazar, and at Kohima (46½ m.) supplies are also obtainable, but these are the only two places where anything can be procured. There are no carriages, motor-cars, horses, ponies, or elephants to be hired at Manipur Road, and there are no servants in the bungalows. Those who own motors can make the trip comfortably in two days, halting for the night in Kohima. The road ascends 5700 ft., and then descends to the valley, the last 15 m. being level. The grades are easy, but the corners are sharp. Imphal was the scene of a disaster in 1891, when Mr Quinton, Chief Commissioner of Assam, and several other officers were captured by treachery and murdered.

The State is governed by the Raja Chura Chand Singh and a Darbar. The scenery on the valley and on the roads leading to it is most beautiful. The valley is surrounded by hills, which rise from 2500 ft. to 5000 ft. above it. The whole drainage of the valley and the surrounding hills escapes at the Southern end of the valley through a gorge in the hills only a few hundred yards wide. There are several large lakes, on which in the cold weather magnificent duck shooting is obtainable. In the swamps round these lakes a species of *Thamin* is to be found, but the shooting is difficult and fatiguing, and can only be indulged in during March, April, and May, when the swamps are at their driest.

The people of Manipur are very fond of games. Hockey, both on horseback and on foot, is played everywhere, and the religious dances are most interesting spectacles. From Imphal good bridle roads, with R.Hs. at every 13 m. or 14 m., lead to Silchar (125 m.) and Sittang, on the Chindwin (102 m.).

If ample notice is given to the Political Agent, carts can be arranged for at Manipur Road station and coolies at Silchar. A cart carries 10 maunds; the charge for the journey to Imphal is Rs.18 to Rs.24. Coolies carry 60 lb., and the charge per coolie from Silchar to Imphal is Rs.5, 8as. The journey from Silchar to Imphal occupies nine days.

Tea Industry.

Assam holds the first place among the Provinces of India as regards the production of tea. It contains, according to the latest report for 1916, 779 gardens, with an area of 383,821 acres under cultivation, and an out-turn of 245,385,920 lb. of manufactured tea.

The industry shows steady progress. Tea from the Brahma-

putra Valley sold in Calcutta up to March 1916 for gas. 8p. a lb.; from the Surma Valley for 8s. 1p. per lb. At the London sales up to March 1916 the price of the former was 11.23d. per lb.; of the latter, 10.06d. per lb. The labour question is one of great moment in Assam, where the area is great, the population sparse, and the demand for tea-garden labourers always present. At the close of 1915-16 the total strength of the labour force was 953,127 persons, of whom a large proportion consisted of women and children. In that year as many as 110,376 labourers, of whom 37,768 were children, immigrated into Assam. Most of the immigrants were not under the Labour Act. The prejudice against Assam is being gradually removed with improved conditions and attractions. Time-expired tea-garden coolies can obtain Government land for colonisation on favourable terms.

Tea was first discovered growing wild in Manipur, and from that State considerable quantities of seed are even now exported to Cachar. For many years little or no advantage was taken of the discovery. Any traveller wishing to visit the tea-gardens will have no difficulty in obtaining an introduction to some planter from friends, or through friends from some London or Calcutta agents of a tea-estate, and may be sure of a hospitable reception. The tea districts are for the most part well furnished with driving-roads—many of them passable for light motor-cars during the dry season—and R.Hs.

- (3) By E. Bengal Railway in 20½ hours from Calcutta to (461 m.) Gauhati, the centre of the Assam Valley proper. Fares—Rs. 44, 9as.; Rs. 22, 4as. 9p.; Rs. 6, 3as. 6p.

The direct route to Gauhati

from Calcutta (Sealda) follows the same course as that to Darjeeling as far as

172½ m. Santahar junction.

It then swings E. to 197½ m. Bogra, 269½ m. Kaunia, to Teesta junction, crossing the Teesta by a bridge 2100 ft. long to

279 m. Lalmonirhat (there are a Refreshment-room and a D.B.),

287 m. Gitaldaha junction,

311½ m. Golakganj junction to

454 m. Amingaon, on the Brahmaputra; there cross the river by a railway ferry, and then across to 456 m. Pandu, and from there by rail or motor car to

461 m. Gauhati.

From GITALDAHA a branch metre-gauge railway line runs N. to Cooch Behar, of which the Koch Chief is His Highness Maharaja Raj Jitendra Narayan Bhup Bahadur, K.C.S.I., who succeeded his brother in 1913. The State has an area of 1307 sq. m., a population of 600,000, and a revenue of 28 lakhs. The State has been famous for its big-game shooting.

The Assam line turns E. again, round the elbow of the Brahmaputra, to

319 m. Golakganj junction.

Branch to (332 m.) Dhubri, once the usual starting-place of the short steamer route to Gauhati. Steamers still run between these two places by Goalpara, the journey of 130 m. occupying about 41 hrs. Travellers can proceed by steamer to Tezpur, the next day to Nigriting, and about 24 hrs. later will reach Dibrugarh, but will probably prefer the railway route (*via* Lumding).

Travellers must remember that the cold wind caused by the movement of the vessel may be penetrating, and that warm clothes are therefore necessary. The scenery is moderately pretty only; on the right (left river-bank) are the Garo Hills, and away on the left, if the atmosphere is clear, may be seen the grand range of the Himalayas, and the wooded Bhutan Hills in

the middle distance; the snowy range is seen all along the river, and showing to special advantage at sunrise. At Goalpara (D.B.), situated at the foot of a conical hill (left bank), may be seen picturesque native merchants and wild hill tribesmen, who come down from the mountains to trade in skins, etc. Above this numbers of crocodiles will be noticed basking on the sand-banks in the sun.

Hence the line runs at a distance from the river to (395 m.) Sorbhog and (462 m.) Amingaon.

ROUTE 25.

CALCUTTA to MADRAS by Balasore, Cuttack, Bhubaneswar (visit to Udayagiri Caves, Puri, and the Black Pagoda), Ganjam, Vizianagram, Waltair for Vizagapatam, Bezwada, and Nellore—Bengal-Nagpur Railway from Howrah to Waltair and Madras and S. Mahratta Railway, N.E. section, from Waltair to Madras.

(Distance 1032 m.; time occupied by mail train, 39½ hrs.; fares—Rs. 91, Rs. 44, Rs. 13, 7 as.)

Howrah.—Calcutta (see p. 95).

20 m. Ulubaria (see p. 99).

34 m. Kola Ghat (R.). Here the railway crosses the Rupnarain River, a large tidal river flowing into the Hooghly, near its junction with which are the famous James and Mary Sands, the scene of so

many wrecks in that river (p. 99). The bridge over this river, about ½ m. in length, is a very fine one, and from the engineering difficulties met with in construction it ranks as one of the most important bridges in India.

72 m. Kharakpur is an important railway junction for the line to Nagpur, Bhusawal, and Bombay (see Route 7). It is the seat of the main workshops of the Bengal-Nagpur Railway. They are large modern structures, provided with up-to-date machinery, worked by electrical power. Over 7000 workmen are employed, and the population of the railway settlement, which is self-contained and carefully laid out, is over 20,000 persons.

From Kharakpur there is also a branch to (8 m.) Midnapore, an old station of the E.I. Company (population 32,740) and headquarters of the district. The spot in the Midnapore District originally famous was the Buddhist seaport of Tamruk (p. 100). Another branch to the N.W. runs through Bankura to (103 m.) Adra junction between Sini and Asansol (p. 122). There is a good D.B. about ½ m. from the station.

Ghatal.—Headquarters of a Subdivision in the District of Midnapur. Important trade centre. During the rains there is a daily steamer service from Calcutta. In other seasons steamers proceed up to Ranichak, whence the journey is made by boats. Its chief industries are the weaving of cotton and tussore silk cloths, the manufacture of bell-metal utensils, and the preparation of coarse earthen pots.

Contai.—Headquarters of the Subdivision of the same name, 36 m. by rail from Contai Road Railway Station, on the B.N.R. The S.E. of the district is a mari-

time tract lying along the Bay of Bengal.

Kaukhali, or Cowcolly.—A village in the Contai Subdivision, situated on the sea-coast 3 m. S. of Ked-gun. A lighthouse was built here in 1810.

The District is full of tracts containing Sal jungle, in which black bear and leopards are to be found. In winter snipe and duck can be shot in certain tracts.

144 m. Balasore (R., D.B.), headquarters of a Civil District, it is close to the railway station, where there is a Refreshment-room of the Bengal-Nagpur Railway. The D.B. is about 10 min. walk from the station, furnished and accommodating two persons. Balasore is an ordnance station for testing shells and guns. The open sea makes it a favourite resort, and it promises to become in the near future a large watering-place. The delicious pomfret fish is procurable, and is finding its way into the Calcutta market. There are large Roman Catholic and Baptist Missions in the town. The place, of which the correct name is Baleswar, was once of great commercial importance, and the Dutch, Danes, English, and French had factories here; Pipili, in the District, was the first spot at which, in 1634, the English E.I. Company established a factory in Bengal, and from here the Balasore factory was founded in 1642, in accordance with the grant issued by the Delhi Emperor at the request of Mr Gabriel Boughton. There are two curious old Dutch tombs, dated 1683, built like three-sided pyramids, about 20 ft. high, in a small secluded enclosure near the native part of the town.

There is a fine temple at Remuna (6 m. from the station), where pilgrims to Puri congregate.

202 m. Jajpur Road for Jajpur, 7 m. to the W. (D.B.). The ruins¹ at Jajpur, once the capital of Orissa, are fine and interesting, but probably only an antiquarian will care to visit them. The chief object is a fine pillar 32 ft. high, standing on a base 5 ft. 5 in. high, square, and composed of large blocks of stone without any ornament. The shaft and capital are 26 ft. 7 in. high, and appear to be a monolith. The capital, of exquisite proportion, is carved to imitate lotus blossoms, and adorned below with lions' heads, from whose mouths depend strings of roses or beads. The capital once was crowned with a figure of the Garuda, or eagle-vehicle, of Vishnu. The Garuda is said to have been hurled from the summit of the pillar by the Muhammadans, who attempted also to destroy the pillar itself; it is now in the temple of Narsingh, 1 m. S. of the temple of Jagannath. The finest temple was that of Trilochan, the Three-Eyed; on the Binjharpur Road is a well-built ancient bridge. In the compound of the Subdivisional Magistrate, adjoining the District Board Bungalow, are three monolithic statues of Indrani on her elephant, Varahi with the boar, and Chamundi (p. 107) represented as the Goddess of Famine; and in a dry bed of the river are seven other statues, each 6 ft. high. Near the P.W.D. Bungalow is also the fine mosque of Nawab Abu Nasir Khan, built in 1681 A.D.

There is a bungalow very close to the railway station of Vyassoravar (18 m. from Jajpur) where respectable travellers and Government officers halt while proceeding to Jajpur. From this place there is a metalled road *via* Chaibasa (Singbhum) for motoring to

¹ There is an excellent little handbook of Cuttack, Jajpur, Bhubaneswar, Udayagiri, Puri, and Kanarak, by Mr Brown, formerly Judge of Cuttack.

Bankipore, the capital of the Province.

The Nalatigiri hills, with some Buddhistic caves and inscriptions in Pali are places of antiquarian interest. They are 10 m. from the Dhanmandal Railway Station in the Jajpur Subdivision. Communication by fair weather road is cut off by two rivers. A P.W.D. Bungalow is available at 2 m. from the hills.

253 m. **Cuttack** * (D.B.) (population 52,528) is situated at the apex of the delta of the Mahanadi River, which rises in the Raipur district of the Central Provinces, and has a length of 529 m. It rushes down upon the delta through the narrow gorge of Naraj, 7 m. W. of the town of Cuttack, and, dividing into two streams, encircles the city on the N. and E., and on the W. by its branch, called the Katjuri. The river during the rains pours down a prodigious flood, and to prevent its sweeping away the city an important stone embankment has been erected on the spit of land on which that stands.

Cuttack is the chief station of the Sub-Province Orissa. It was founded in the 10th century A.D. by one of the Kings of the Kesari, or Lion, dynasty. Its position as the key of the Orissa hill territory and the centre of the network of the Orissa canals gives it both military and commercial importance. It is famed for its filigree work in gold and silver. It is the seat of the Circuit Court of the Patna High Court. There are two Clubs, one European and one Indian. The former is within the Fort enclosure and the latter at a short distance. Within the enclosure there is a Circuit House, constructed about fifteen years ago for the occupation of the Lieutenant-Governor of the Province.

There is no hotel: a refresh-

ment-room is maintained by Messrs Kellner & Company at the Cuttack Railway Station. There is a Staging Bungalow 2 m. from the railway station.

The Fort, called Fort Barabati, is in ruins, and all that remains of it now is a fine gateway. It was taken by the British in 1803. In the public gardens on the Taldanda Canal are a beautifully-carved arch and some other carved stones.

Near Cuttack are important weirs for regulating the flow of the rivers. Two of these, the Birupa and Mahanadi, may be seen in quitting the place. A road a little to the N. of the Taldanda Canal leads to the Jobra Ghat, where are the Great P.W.D. workshops and the Mahanadi Weir, which is 6400 ft. long and 12½ ft. high, and cost in round numbers thirteen lakhs of rupees. It was begun in 1863 and completed in 1869-70. The Birupa River leaves the Mahanadi on its right bank, and the weir there is 1980 ft. long and 9 ft. high. Of the four canals which form the Orissa Irrigation System, two take off from the Birupa Weir, and one with its branch from the Mahanadi Weir.

Within 11 m. N. and S. of Cuttack the railway line is carried over no less than five big bridges, the whole section comprising the most difficult piece of riverain engineering to be seen anywhere in India.

Kendrapara, 38 m. to the E. of Cuttack town, connected by road and canal. A steam-launch plies daily between the two. A place of pilgrimage for Hindus where the idol Baldeb Jiu is much revered. It is visited by up-country pilgrims, being known as *Tulasi Khetra*. There are four D.Bs. on the way.

Banki. A place of some im-

portance, situated at the outskirts of some of the Feudatory States at a distance of 28 m. to the W. of Cuttack. Lately a bridge over a deep river has been constructed which makes communication easier. Two D.Bs. are on the way and a P.W.D. Bungalow is at Banki itself. It is an important centre of the Co-operative Credit movement in the Province. It is possible to motor from Cuttack to Banki at most seasons of the year but the Khatjuri River has to be crossed.

271 m. from Calcutta is Bhubaneswar. There is a P.W.D. Bungalow at Bhubaneswar itself. The R.H. (supplies should be taken) is at Khandagiri, 4 m. to the N.W. of the station—permission to occupy it should be obtained from the Subdivisional officer of Khurda, who will also accord leave to occupy a room in the District Board Inspection Bungalow at Bhubaneswar if this is desired. The best plan for sight-seeing is to proceed from the station to the Khandagiri R.H., spend a day in examining the Buddhist caves there, proceed early the second morning to the Asoka Rock at Dhauli, 5 m. S. of Bhubaneswar, and return to the latter to visit the temples there and pass the heat of the day at the police station. A palanquin is the only means of locomotion round Bhubaneswar, and should be ordered beforehand, with extra bearers if it is desired to move about with a moderate degree of speed.

The Khandagiri R.H. is only a few yards from the Jain and Buddhist caves. The former are on the Khandagiri Hill at the back of it; the latter are on a projecting spur to the front of it, and date from between 250 B.C. to 100 A.D.

The *Udayagiri Hill*¹ is 110 ft.

high, and the caves are excavated in the sides of it at various levels. The first reached from the R.H. is the Swargapuri Cave, from which a level path to the right (E.) leads round to the Rani ka Naur and Ganesh Gumpha caves, and winds upward and backwards to below the Hathi Gumpha, where it is joined by the path which runs up steeply to the left from the Swargapuri Cave past the Jaya Vijaya and Vaikuntha caves to this point. The Rani ka Naur, or Queen's Palace, faces E., and consists of two rows of cells, one above the other, shaded by pillared verandas, with a courtyard, 49 ft. by 43 ft., cut out of the hillside, and is probably intended to represent the side and two ends of a structural vihara. The upper storey, 63 ft. to the front, which stands back, has eight entrances giving access to four cells. At the N. end are two dwarf-pals, representing men in armour, with buskins and greaves, cut out of the solid rock in alto-relievo; these are probably figures of the Yavana warriors who conquered Orissa. At either end is a rock lion, executed with some spirit. The back wall of the veranda has an extensive series of tableaux, difficult to make out. First on the left are men carrying fruit, a group of elephants, and soldiers armed with swords—this is probably a scene from Ceylon. Then comes a scene, repeated at the Ganesh Gumpha, of a combat over a woman—and then one of the winged deer presenting itself to the King. The last scene which can be made out represents a love episode.

The lower storey also has eight entrances. The ground-floor front was formed of a colonnaded veranda 44 ft. long, having a raised seat, or berm, along its whole inner line. It was formerly supported by a row of eight square pillars, of which only the two end ones remain, and opened S. into

¹ See pp. 55-94 of *The Cave Temples of India*, and Fergusson's *Indian Architecture*, 2, 9-13.

an oblong chamber and N. into three rooms. Here also there is an extensive frieze, much dilapidated, so that only four fragments admit of description. The first represents a house, and a female figure looks out of each of the three doors, and one from the balcony, which is protected by a Buddhist rail. A similar rail runs in front of the lower storey, with a large tree by its side. In the second fragment a saint or priest holds a piece of cloth in his left hand and extends the right as in the act of blessing; one servant holds an umbrella, and another carries a sword. Next a devotee on his knees, and beyond two kneeling women bring offerings, one dusting the feet of a boy, who has one hand on her head. In the third fragment is a saddle-horse with three attendants, and the holy man with an umbrella held over him, and two attendants with swords. In the fourth fragment there is a group of six women, three carrying pitchers on their heads, and one kneeling and offering her pitcher to a figure, which is lost. On the right wing are scenes of a man and woman making offerings, and of a woman dancing to the accompaniment of four musicians.

The *Ganesh Gumpa* is almost due N. of the Rani ka Naur Cave, and much higher in the hill. It has only one storey, and consists of two compartments with a veranda in front. There are three pillars in the front of the veranda, square and massive, and two others have fallen. The pillars have brackets, with female figures carved on them. The flight of steps leading to the veranda has a crouching elephant on either side, each holding a lotus in his trunk. The veranda wall is ornamented with a series of eight tableaux in alto-relievo. This frieze and that in the Rani ka Naur Cave represent the same story, the main difference being

that in this cave the figures are more classical and better drawn, and therefore, Mr Fergusson thinks, more modern. In the Rani's Cave they are certainly more Hindu. The scenes include an escape on elephant back, dismounting from the elephant, and resting in the forest. The Buddhist trisula (trident) and shield are carved on this cave.

The *Swargapuri* has no carving or inscription except on some pilasters near the door, from the top of which runs a line of well-sculptured foliage with an elephant issuing from trees at the end of it.

The *Jaya Vijaya Cave*, a double-storeyed one, has a frieze with three compartments, the base being formed of a line of Buddhist rails. In the central compartment is a Bo-tree (p. 51). Beside the tree are two male figures, that on the left with folded hands, and that on the right holding a bit of cloth tied to the tree and a small branch. Near the men are two females bringing trays of offerings. The semicircular bands of scrollwork over the doorways are different, and beyond them are two turbaned figures carrying trays of offerings.

The *Vaikuntha* is a small two-storeyed cave, with the upper storey set back and a frieze of men and animals across the front. It was probably the prototype of the Rani ka Naur and Ganesh Gumpa.

75 yds. to the N.W. is the *Haiki Gumpa*, or "Elephant Cave," which Mr Fergusson describes (2, 11) as an extensive natural cave, improved by art. It is perfectly plain, but has an inscription above it of 117 lines, which is referred to 300 B.C., and is probably the oldest memorial here. To the left is a boulder which has been hollowed out into a cell 5 ft. sq. A few yards N. of the "Elephant Cave" is the *Pavana Gumpa*, or "Cave of Purification"; and about 75 ft.

to the S.W. of the Pavana Gumpā is the Sarpā Gumpā, or "Serpent Cave," having on the top of the entrance a rude carving of the hood of a three-headed cobra. Under this is the door, through which a man can just crawl; the interior is a cube of 4 ft. Beside the door is an inscription translated by James Prinsep.

50 ft. to the N. is the very interesting *Bagh Gumpā*, or "Tiger Cave," cut externally into the shape of the upper part of a tiger's head, with the jaws at full gape. The eyes and nose of the monster are still well marked, but the teeth are now imperfectly discernible. The head at top, where it joins the hill, is 8 ft. 8 in. broad. The gape is 9 ft. wide, and the entrance to the cell occupies the place of the gullet. To the right of the entrance is an inscription in the Asoka character. At the beginning of the inscription is a Buddhist monogram, and at the end a Swastika cross.

The *Khandagiri Hill* is 133 ft. high and faces E. It is thickly covered with trees. The path which leads to the top is steep, and at the height of about 50 ft. divides into two, one branch leading to the left, and to a range of Jain caves cut in the E. face of the hill (see below).

The path on the right leads to the *Ananta Cave*, which is a narrow Buddhist excavation, with four doorways and a veranda with pillars and pilasters with decorated sides. Instead of a capital, these have a projecting bracket, shaped like a woman. The architrave is heavy, and over it is a parapet supported on corbels. In the centre of the back wall of the cave is a Buddha in bas-relief. The frieze is in five compartments, and represents figures running with trays of offerings, athletes fighting with bulls and lions, and two lines of geese running with spread wings, each with a flower in its bill. In the semicircular space

under one of the arches is a nude female standing in a lotus-bush, and holding a lotus-stalk in either hand. Two elephants are throwing water over her with their trunks. This is a representation of Lakshmi, the first of the Hindu Pantheon to be revered by the Buddhists. In the other tympanum is a scene of worshipping of a Bo-tree.

The left path leads to a modern gallery, and to the S. to a range of three openings. There is here a Sanskrit inscription of the 12th century recording that the cave belonged to Acharya Kalachandra and his pupil Vellachandra. Next comes a range of caves facing the E., divided into two compartments by a partition in the middle. On the back wall is a row of seated Dhyani Buddhas and some new images of Jaina Deva. At the E. end is an altar of masonry, on which are ranged a number of Jain images. The second compartment is very similar. On the back wall is a row of Dhyani Buddhas 1 ft. high, and below, females seated on stools, some four-handed, others eight-handed, with one leg crossed and the other hanging. Under all are lions *couchant*.

From this to the top of the hill is a stiff climb, and the steps in one place are very steep. On the summit of the hill is a plateau and an 18th-century temple to Parasnath. From it is a magnificent panoramic view 15 m. all round. The groves of mango and jack trees are most beautiful. In front of the temple is a fine terrace, 50 ft. sq., with a raised masonry seat all round. To the S.W. of the temple is a smooth terrace of 150 ft. diameter, gently sloping to the W., called the Deva Sabha. In the centre is a small square pillar, with a bas-relief of Buddha on each side, and round it four circles of chaityas. Three small boulders, set in a triangle and covered by a dolmen of sand-

stone, stand in the inner circle. E. of the Deva Sabha, at 100 yds., is a tank cut in the solid rock, called the Akasha Ganga, or "Heavenly Ganges." Immediately below the tank is a cave where the remains of Rajah Lelat Indra Kesari are said to rest. These caves probably were originally Buddhist, and were afterwards converted by the Jains.

Bhubaneswar.—The first mention of Bhubaneswar, in the Records of the Temple of Jagannath, dates from the reign of Yayati, 474-526 A.D., the first of the Kesaris, or Lion dynasty of Orissa. He expelled the Yavanas, thought by Stirling and Hunter to be the Buddhists who ruled Orissa for 150 years after a successful invasion about 300 A.D. His successors reigned in Bhubaneswar until Nripati Kesari, in 940-50 A.D., founded Cuttack and made it his capital.

7000 shrines once encircled the sacred lake; now but 500 remain in various stages of decay, exhibiting every phase of Orissan art "from the rough conceptions of the 6th century, through the exquisite designs and ungrudging artistic toil of the 12th, to the hurried dishonest stucco imitations of the present day." It is easy to perceive that there are two styles of architecture which run side by side with one another. The first is represented by the temples of Parashuramesvara and Muktesvara, the second by the Great Temple. They are not antagonistic but sister styles, and seem to have had different origins. "We can find affinities with the first two, but I know of nothing like the Great Temple anywhere else."

"The Great Temple¹ is," says Mr Fergusson, "perhaps the finest

¹ *Indian Architecture*, 2, 99, where a plan and illustration of the Great Temple will be found.

example of a purely Hindu temple in India." Unfortunately none but Hindus may enter the enclosure, the high walls of which are 7 ft. thick and of large cut stones without mortar. From the top, however, of a platform outside the N. wall a view of the interior may be obtained. Besides the Great Temples and the halls of approach to it there are also many smaller temples in the enclosure, of which a plain one, 20 ft. high, is the oldest; at the N.E. corner is a pavilion, perhaps built for a music hall, but now containing an image of Parvati.

The Great Temple was built by Lelat Indra Kesari (617-57), and consisted originally of only a vimana and porch; the beautiful Nath and Bhog mandirs now in front of it were added between 1090 and 1104. The presiding deity is Tribhubanesvara, "Lord of the Three Worlds," generally called Bhubaneswar. He is represented in the sanctuary by a block of granite 8 ft. in diameter, and rising 8 in. above the floor, which is bathed with water, milk, and *dhup*. There are twenty-two *dhupas*, or ceremonies, daily, consisting in washing the teeth of the divinity, moving a lamp in front, dressing, feeding, etc.

"The Great Tower can be seen from outside the wall. It is 180 ft. high, and, though not so large, is decidedly finer in design than that at Tanjore. Every inch of the surface is covered with carving of the most elaborate kind; not only the divisions of the courses, the roll mouldings on the angles, or the break on the face of the tower but every individual stone in the tower has a pattern carved upon it." Especially in the perpendicular parts seen from over the wall, "the sculpture is of a very high order and great beauty of design." The top of the spire is flat, and from the centre rises a cylindrical neck, supporting a ribbed dome, over which is

placed the Kalasha or "pinnacle." Twelve statues of lions seated support the dome, and over all is a broken trident. The shrine itself is called the Bara Dewal, and the original hall of approach to it, the Jagmohan. In front of the latter now is the Bhog Mandir, or "Hall of Offerings," and E. of that the Nath Mandir, or "Dancing Hall." It is elegant, of course, but differs from the style of the porch, in that "all that power of expression is gone which enabled the early architects to makesmallthingslook gigantic from the mere exuberance of labour bestowed on them" (Fergusson, *Ind. Arch.*, 2, 103).

Outside the enclosure are many small subterraneous temples. The jungle to the S. of the Great Tower, to the extent of 20 acres, is said to be the site of Lelat Indra Kesari's Palace, and exhibits everywhere the remains of foundations and pavements. N. of the temple is the very fine tank called *Vindusagar*, "Ocean Drop." In the centre is a Jal Mandir, or "Water Pavilion," consisting of several shrines, on which perch numerous cranes in motionless repose. In front of the central ghat of this tank there is a magnificent temple, with a porch, a more modern dancing-hall, and Bhog Mandir. All but the Bhog Mandir are lined with brick-red sandstone, elaborately sculptured. The temple is sacred to *Vasudev*, or Krishna, and *Ananta*, or Balaram, and no pilgrim is allowed to perform any religious ceremony in the town or to visit Bhubaneswar without paying for permission here. Along the E. side of the tank will be noticed several temples of the same shape as the Great Temple. About $\frac{1}{4}$ m. to the E.N.E. of the Ananta and Vasudev Temple is one, about 40 ft. high, of *Kotitirthesvara*, "The lord of ten millions of sacred pools." It is evidently built of stones from some other edifice. $\frac{1}{4}$ m. to the E. of this is the *Temple of Brahmesvara*,

on a high mound, formed into a terrace. It is most sumptuously carved, inside as well as out, and was erected at the end of the 9th century A.D. Close to its terrace on the W. side is a tank called Brahma Kunda. N.E. is an old ruined temple of basalt, to *Bhaskaresvara*, "Sun-god," and said to belong to the close of the 5th or the beginning of the 6th century.

At the N.E. corner of the Great Temple is a very handsome tank surrounded by a row of 108 small temples, and $\frac{1}{4}$ m. E. of this, beyond the Muktesvara and Parashuramesvara temples, is the once magnificent Temple of Raj Rani. Mr Fergusson (*Ind. Arch.*, 2, 103) says of it: "The plan is arranged so as to give great variety and play of light and shade, and the details are of the most exquisite beauty, it is one of the gems of Orissan Art." It faces the E., and has a porch in front, both of dressed brick-red sandstone. The niches are filled with statues 3 ft. high, executed with great vigour and elegance. One pillar has three kneeling elephants and lions, with a Nagni or female Naga with her seven-headed snake hood. Over the doorways are represented the Navagraha, or "nine planets."

About 300 yds. to the W. of the Raj Rani is a grove of mango-trees, called *Siddharanya*, "Grove of the perfect beings." Here many temples were built, of which more than twenty remain entire. Of these the most remarkable are Muktesvara, Kedaresvara, Siddhesvara, and Parashuramesvara.

Muktesvara is the handsomest, though the smallest. It is 35 ft. high, and the porch 25 ft. high. The floral bands are better executed than in most of the temples; the bas-reliefs are sharp and impressive; the statuettes vigorous and full of action, with drapery well disposed; and the disposition of the whole is elegant and most

effective. Among the subjects are a lady mounted on a rearing elephant and attacking an armed giant; a figure of Annapurna presenting alms to Siva; females, half-serpents, canopied under five or seven-headed cobras; lions mounted on elephants or fighting with lions; damsels dancing or playing on the *mrīḍaṅga*; an emaciated hermit giving lessons. The scroll-work, bosses, and friezes are worthy of note. The chamber of the temple is 7 ft. sq., but outside measures 18 ft. In front of the porch is a Toran 15 ft. high. It is supported on two columns of elaborate workmanship, unlike anything of the kind at Bhubaneswar. Over it are two reclining female figures. It is said that it is used for swinging in the Dol Festival.

Kedaresvara.—Close by a tank behind this temple is the Kedaresvara Temple, and near it, against the outer wall of a small room, is a figure of Hanuman, the monkey-god, 8 ft. high, and one of Durga standing on a lion. Her statue is of chlorite, and has the finest female head to be seen in Bhubaneswar. The Kedaresvara Temple is 41 ft. high, and has an almost circular ground plan; it is probably older than the Great Temple, and possibly dates from the middle of the 6th century.

N.W. of Muktesvara is Siddhesvara, which is very ancient, and was once the most sacred spot on this side of Bhubaneswar. It is 47 ft. high, and has a well-proportioned porch.

The Parashuramesvara, 200 yds. to the W. of the Muktesvara, is considered by Mr Fergusson (*Ind. Arch.*, 2, 97) the oldest temple at Bhubaneswar. "The sculptures are cut with a delicacy seldom surpassed." The ground plan is a square, the porch is oblong and covered with bas-reliefs represent-

ing processions of horses and elephants in the upper linear bands under the cornice, and scenes from the life of Rama in the lower. The roof is a sloping terrace, in the middle of which is a clerestory with a sloping roof, flat in the middle. As the roof stones project beyond the openings, neither direct rays of sun nor rain can penetrate.

The famous Dhauli or Aswātama rock, on which is inscribed the best-preserved set of edicts of King Asoka, lies between 4 m. and 5 m. S.E. of Bhubaneswar. The rock, unlike that of Shāhbāgarhi (p. 336), is an isolated one on the level of the plain in front of a low ridge; the face inscribed is 15 ft. by 10 ft., and above it are the remains of an elephant. The clearness of the inscription, which has been exposed to the sun and storms of twenty-two centuries, is wonderful.

283 m. Khurda Road, branch line to (28 m.) Puri. The great temple of Jagannath is seen soaring skywards long before Puri is reached. On the N. side of the line, some miles W. of Puri, may be seen an old Orissan bridge.

311 m. from Calcutta PURI * (D.B. has been leased out as the Seaside Hotel). The railway station lies to the N. of the town, and the Civil Station runs along the seashore. Steamers occasionally call at Puri, but there is no shelter for them and no landing-place. The *Circuit House* is near the D.B.; it is roomy, and travellers with an introduction are sometimes allowed to stop there. The *Church* is about 80 yds. distant. There are villas on the seaside, where the climate is very salubrious.

The town of Puri is about 1½ m. in breadth from E. to W., and 3½ m. long from N. to S. The population, which has greatly increased since the opening of the

railway, is 39,686; but during the great festivals this number is increased by 100,000 pilgrims. The town covers an area of 1871 acres, including the *Kshetra*,¹ or "sacred precincts." It is a city of lodging-houses, and the streets are mean and narrow, except the *Baradand*, or road for the Car of Jaganath, when he goes from his temple to his country-house. This road runs through the centre of the town N. and S., and is in places half a furlong wide. The endowments of the temple provide a total annual income of Rs. 70,000, and the offerings of pilgrims amount to Rs. 150,000 a-year, as no one comes empty-handed. The richer pilgrims heap gold and silver and jewels at the feet of the god; every one gives beyond his ability, and many cripple their fortunes for the rest of their lives. It may be remembered that when dying Maharaja Ranjit Singh of the Panjab bequeathed the Koh-i-Nur to Jaganath, but his successor did not give effect to his bequest. There are more than 6000 male adults as priests, warders of the temple, and pilgrim guides, and, including the monastic establishments and the guides who roam through India to escort pilgrims, there are probably not less than 20,000 men, women, and children dependent on Jaganath. The immediate attendants on the god are divided into thirty-six orders and ninety-seven classes. At the head of all is the Raja of Khurda, who represents the royal house of Orissa, and who is the hereditary sweeper of the temple. There are distinct sets of servants to put the god to bed, to dress and bathe him, and a numerous band of nautch girls who sing before him.

The town is of great antiquity,

and was probably the Dantapura where the sacred relic of Buddha's tooth was preserved and was finally transferred to Ceylon.

The title Jaganath (Juggurnath) (Sanskrit="Lord of the Universe") is really a name of Krishna, worshipped as Vishnu; the immense popularity of the shrine was due to the doctrine artfully preached that before the god all castes were equal. The image so called is an amorphous idol, a rudely-carved log,¹ which some learned men believe to have been a Buddhist symbol, adopted as an object of Brahmanical worship. This idol is annually dragged in procession on a great car (*Rath*), and as crowds of fanatic pilgrims used to rush forward to draw it, fatal accidents used to occur occasionally, and in some instances also votaries were known to throw themselves beneath the advancing wheels. The number of such accidents and suicides, however, has been greatly exaggerated in the popular imagination, and since Orissa came under British rule the former have been reduced to a minimum. The annual mortality of the pilgrims used, however, to amount to many thousands, and a spread of cholera constantly followed their dispersion from Puri. Of late years much has been successfully done to improve the sanitation and water-supply of the place.

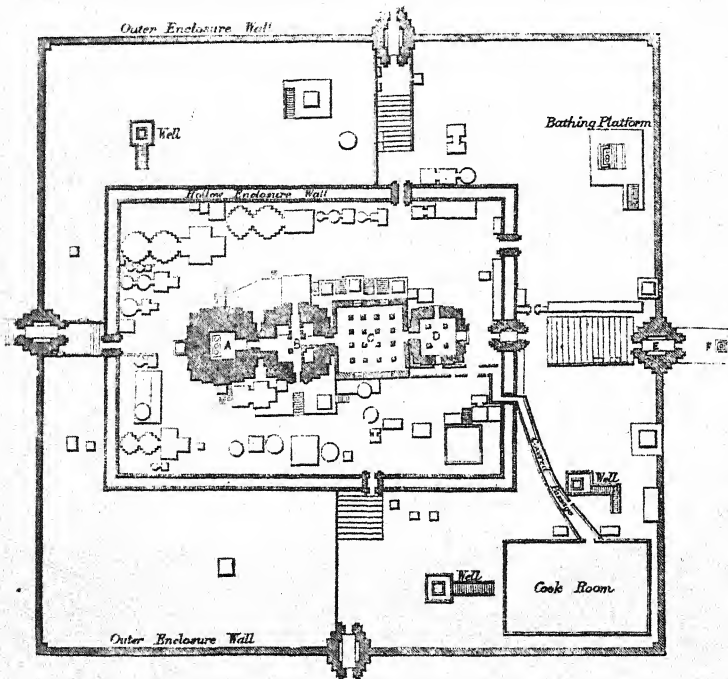
The Temple, Sri Mandir, is situated in the centre of the town, nearly 1 m. as the crow flies from the D.B. It stands upon

¹ The whole country round is divided into *kshetras*, the Parvati round Jaipur, the Hara round Kanarak, the Padma (or lotus) round Bhubaneswar, and the Parushotama round Puri. See the very interesting account of Orissa in the *Imperial Gazetteer*.

¹ Strictly speaking there are three of these idols—viz., Jaganath, his brother Balabhadra, and his sister Subhadra on an altar called the Ratna Bedi, or "jewel seat." The idols are decked with fine jewellery and gaudy dresses, and a large diamond glitters on the head of Jaganath. Bhog, or "Prasad," is offered to the idol-god several times a-day, piled up before him, and afterwards sold to pilgrims and the public. Quaint representations of them in a wooden shrine may be bought in the bazar.

rising ground, which is called Nilgiri, or the "Blue Hill." The sacred enclosure is nearly a square, 652 ft. long and 630 ft. broad, within a stone wall about 20 ft. high, with a gateway in the centre of each side. As the door stands open, it is possible to see the bands

street—see to servants of the house. In front of the E. gate is an exquisite *Pillar* brought from the Black Pagoda at Kanarak. It stands on a platform of rough stones, and, reckoning to the top of the seated figure of the Garuda, or "eagle," which surmounts it, is



Scale 200 ft. to the Inch

Plan of Temple of Jaganath. (Fergusson, *Ind. Arch.*, 2, 108.)

of pilgrims within, but not the temples, of which, besides the Great Pagoda, there are more than a hundred, thirteen of them being sacred to Siva and one to the Sun. It is, of course, strictly closed to all non-Hindus, but the tower and front and the scene at the entrance can be comfortably viewed from the roof of a lodging-house on the opposite side of the

35 ft. high. The Lion Gate (E.), on entering which the pilgrims are slightly struck with a wand by an official, has its name from two large lions of the conventional form, with one paw raised, which stand one at either side of the entrance. Within is a second enclosure surrounded by a double wall, having an interval of 11 ft. between the walls, and within this

again is the temple proper. The "Hall of Offerings," or *Bhog Mandir* (D.),¹ is said to have been built by the Mahrattas in the last century at a cost of 40 lakhs of rupees. It was part of the Black Pagoda of Kanarak, and was brought thence by them. The *Nah Mandir* (C), or "dancing-hall," also of late date, is a square hall measuring 69 ft. by 67 ft. inside. The walls are plain, with only two figures of dwarfpals, called Jaya and Vijaya, and a marble figure of Garuda 2 ft. high.

The *Jagmohan* (B), or "Hall of Audience," where the pilgrims see the idols, is 80 ft. sq. and 120 ft. high. The *Baradewal* (A), or "Sanctuary," where the idols are, is also 80 ft. sq., and is surmounted by a lofty conical "tower" or *vimana* 192 ft. high, black with time and surmounted by the Wheel and Flag of Vishnu.

The idols themselves—that is to say, Jaganath, with his brother Balabhadra and his sister Subhadra—are mere logs, without hands or feet, coarsely carved into a likeness of the human bust. The date of the erection of the temple is 1174 to 1198, and it cost about half a million sterling; but it has since been repeatedly repaired, greatly to "the ruin of it as a work of art." The building of 1198 was a reconstruction by Raja Anang Bhim Deo, in expiation of the offence of having killed a Brahman. The idol of Jaganath is said to have appeared about 318 A.D.

There is a street about 45 ft. broad all round the temple enclosure. Turning to the left from the Lion Gate along this road, the visitor comes to the S. gate, where steps lead up to the entrance. The entrance itself is 15 ft. high, and is ornamented with many figures. Above are depicted scenes from the life of

Krishna. The supports of the massive roof are of iron.

Rather more than a mile to the N. of the temple, and approached by the broad Baradand—a picturesque grassy route in the cold weather—is the famous Garden House, to which the Car of Jaganath is brought at the Car Festival in June or July, and there it stays for eight days during the festival, until it is drawn back to the temple. The house is a temple within a garden enclosed with a wall 15 ft. high. The principal gateway faces the temple, and has a pointed roof, adorned with conventional lions. The gates to this temple are built upon the Hindu arch system, with a series of slabs supporting the roof, each a little longer than the other, and projecting beyond it. The temple is said to be very old, but it has not much pretension to architectural beauty exteriorly; the interior, however, which strangers are permitted to enter, is interesting as giving one an idea of the arrangement of the Great Temple. In one of the pillared halls kneels a Garuda on a column facing the shrine. On the side of the temple there is a plain raised seat 4 ft. high and 19 ft. long, made of chlorite, and this is called the Ratna Bedi, the throne on which the images are placed when brought to the temple. On the walls are some fine carvings of horsemen, etc. Outside, over the door, are various figures of women, 2 ft. high, supporting the roof; also carvings of Brahma with four heads, worshipping Narayan; of Krishna playing to the Gopis, etc.

The great Car in which the journey of the god is made is 45 ft. high and 35 ft. sq., and is supported on sixteen wheels of 7 ft. diameter. The brother and sister of Jaganath have separate cars a few feet smaller. The Car is dragged by 4200 professionals, who come from the neighbouring districts, and during the festival

¹ These letters refer to corresponding letters on the plan.

live at Puri gratis. It is broken up at intervals, when the timbers are made into sacred relics, and another is made of exactly the same pattern. The idols of the Great Temple are also treated in this way.

The legend is that King Indradymna, King of Malwa, pitched his camp here when he discovered Puri, and set up an image of Narsingh. Here the Sacred Log from the White Island stranded, and here the Divine Carver made the images of Jaganath, etc., and here Indradymna performed the horse sacrifice a hundred times over.

1 m. S.W., on the sea-shore S. of the Circuit House, is the *Swarga Dwara*, or "Door of Paradise," where, when all the ceremonies are finished, the pilgrims bathe in the surf and wash away their sins. There is a stump of a pillar 4 ft. high on the right hand, near a small temple. On this pillar offerings are placed, which are eaten by the crows. On the left is the Lahore Math or Monastery. Within the enclosure is a well with excellent fresh water. Hundreds of men and women will be seen bathing, the surf rolling over them in its fury. Afterwards they make heaps of sand and stick pieces of wood into them.

N.W. of the city, on the way to the Garden Temple, are the Chandan Tank and Temple, the Mitiani Tank, the Markhand Tank and Temple, and a *Bridge* built, according to Raja Rajendra Lal Mitra, in 1038-50. It is 278 ft. long by 38 ft. broad, and has nineteen arches.

18 m. N.E. from Puri is Kanarak, celebrated for its **Black Pagoda** (c. 1250-60), which every one should visit in spite of the discomforts of a night journey in a palanquin. A relay of bearers should be sent on half-way; provisions and drinking-water must be taken. Cost—about Rs.15 to Rs.16.

Recent excavations at Kanarak

have led to a much higher appreciation of the great temple, which is figured in Fergusson's *Indian Architecture* (I, 323). The shrine at the W. end of it has been cleared of the mass of superincumbent ruins, and it is now possible to realise the splendid carvings on it, including the grand wheels and horses, which indicate the fact that the temple was the chariot of the Sun-god, to whom it was dedicated. There are a number of very fine carved figures of green chlorite on the walls, but, unhappily, much of the decoration is of a licentious character; inside is a beautifully-carved throne, on which the idol once stood. In front of the shrine is the Jagmohan porch. It has a square base of 90 ft., is built of red laterite, and is called *black* on account of the shadow it casts. The roof is excessively beautiful, and covered with elaborate carvings free from all objectionable features, and Mr Fergusson says of it (*Ind. Arch.*, 2, 107) that there is no roof in India where the same play of light and shade is obtained, with an equal amount of richness and constructive propriety. Mr Fergusson adds (*loc. cit.*) of this building: "Internally the chamber is singularly plain, but presents some constructive peculiarities worthy of attention. On the floor it is about 40 ft. square, and the walls rise plain to about the same height. Here it begins to bracket inwards, till it contracts to about 20 ft., where it was ceiled with a flat stone roof, supported by wrought-iron beams . . . showing a knowledge of the properties and strength of the material that would be remarkable were it not that they seem to be formed of blocks of short lengths, 3 in. or 4 in. square, built together, like bricks, and then covered with molten metal. The employment of these beams here is a mystery. They were not wanted for strength, as the building is still firm after they have

fallen, and so expensive a false ceiling was not wanted architecturally to roof so plain a chamber. It seems to be only another instance of that profusion of labour which the Hindus loved to lavish on the temples of their gods" (*Ind. Arch.*, 2, 107). The entrance of the Jagmohan is on the E. side, guarded by two stone lions, with strongly-marked manes and one paw lifted up, resting on the backs of elephants, which are smaller in size. The height of the entrance is $16\frac{1}{2}$ ft.; the roof was supported by two rafters of iron and four of stone. In front of the entrance, amongst the stones, lay a bar of iron 23 ft. long and $11\frac{1}{4}$ in. thick and broad.¹ The interior of the hall has now been completely filled up in order to save the outer walls. As the E. door is guarded by lions, the N. door is by elephants, and the S. by horses trampling down men, who from their tusk-like teeth, crisped hair, knives, and shields, are intended for aborigines. The spirit with which the horses are carved, and also the device on one of the shields of two climbing lizards, should be noticed. According to tradition the temple was dedicated by Sambhu, son of Krishna, on being cured here of leprosy.

Stirling fixes the date of the Black Pagoda in the year 1241; it is certainly of the 13th century A.D. The spire was never completed. When Fergusson visited Kanarak in 1837 a portion of the Great Tower was still standing. He was of opinion that the destruction of it was owing, not to earthquakes, but to the nature of the soil, which was not solid enough to bear so enormous a

structure. To the S. of the Jagmohan is a very large banyan-tree, under which is a good place for the traveller to take his meal; and near the great tree is a grove of palms and smaller trees, and a garden with a *math*, or devotee's residence. Over the E. entrance used to be a chlorite slab, on which the emblems of the days of the week, with the ascending and descending nodes, were carved. Some English antiquaries attempted to remove this for the Museum at Calcutta, but, after dragging it 200 yds., gave up the attempt, though the Indian builders, after excavating the block in the hills and carving it, had carried it 80 m. across swamps and unbridged rivers to Kanarak. It lies now about 200 yds. to the E. of the temple, and is 20 ft. 2 in. long, 4 ft. deep, and 4 ft. 10 in. broad. It is sadly disfigured with oil and red paint, with which the Hindus have bedaubed it. The sea, about 2 m. off, is only visible from the *débris* of the temple.

327 m. from Calcutta is Balagan. From here the railway line skirts the fine Chilka Lake, some of the scenery along which is of great beauty—in the background being the jungle-clad hills of the Eastern Ghats, while the lake itself is dotted with islands on which, as on the mainland, game of all kinds abounds, and in the cold season has a surface crowded with wild-fowl. The lake is 45 m. long, averages 10 m. in width, is separated by a narrow stretch of sand from the sea, and is shallow, seldom exceeding 6 ft. in depth; the water is brackish, and there is a very slight tide at the Southern end, the sea running into it at Manikpatnam. Trade is carried on in flat-bottomed boats of peculiar structure with lateen sails of bamboo-matting. At Rambha there is a large house on the margin of the lake built by

¹ Other instances of the employment of large masses of iron occur at Dhar and at the Kutb Minar of Delhi (pp. 124 and 277). These iron beams have probably something to do with the fable that there was once a lodestone in the tower of the temple, which used to draw passing ships on to the shore.

Mr Snodgrass¹ in 1792—it is believed from famine funds. It is now the property of the Raja of Kalikota. There is a P.W.D. Inspection Bungalow at Barkul, picturesquely situated on the Western shore of the lake. Permission may be obtained for occupation of the house from the Superintending Engineer, Cuttack. This bungalow is connected by a good road, about 3 m. long, with Balugan railway station.

345 m. Rambha, picturesquely situated at the S. of the Chilka Lake.

356 m. Ganjam station for old Ganjam, situated on the Rushkuliya, and formerly chief port and town of the District; in the early part of the century it was ravaged by an epidemic of fever and abandoned in consequence. The fort, which was commenced in 1768 by Mr Cotsford, the first Resident in Ganjam, still forms an interesting ruin, and recalls memories of former Residents and Chiefs in Council, who were engaged here partly in political and partly in commercial enterprises for the East India Company.

361 m. Chatrapur station, beautifully situated on high ground above the sea, headquarters of the District Magistrate and Collector. D.B. at railway station, furnished; small golf-course.

375 m. Berhampur (Ganjam). Berhampur station (R.) chief town of the Ganjam District (population 31,456), headquarters of the District Judge: an old Cantonment, the troops were removed by Lord Kitchener in 1906. Motors can be hired. D.B., three rooms furnished; meals supplied. Gop-

¹ This was the gentleman who extorted a pension from the E.I.C. by sweeping a crossing in front of the India House.

alpur, the chief seaport of the Ganjam District, is 9 m. by road. Chief buildings are the Jubilee Hospital, Town Hall, Kalikot College. It is noted for its tussore silk cloths and gold-embroidered turbans. A motor-bus service runs from Berhampur to Aska (25 m.), where there is a sugar-factory, and to Russelkonda (50 m.).

Mahendragiri, the highest point of the Eastern Ghats, in the Ganjam District, has on its top five unique structures built of massive stone. One of these is dedicated to the god Siva. There is also a stone pillar on which are engraved the figure of a tiger, two fish, and an inscription. The Cholas of Tanjore, whose crest was the tiger, once extended their sway right up to Mahendragiri, and even beyond. The pillar under reference still bears testimony to it. There is a private bungalow at the summit of the mountain, belonging to the Raja of Mandasa.

437 m. Naupada junction, branch line to (25 m.) Parlakimedi.

466 m. Chicacole Road station. There is a motor-bus service from the station to Chicacole (8 m. by road), a large town which contains a noble mosque built in 1641 by Sher Muhammad Khan, the first Muhammadan Faujdar of the Chicacole Sirkar. It was formerly celebrated for its very fine muslins (D.B. unfurnished). Near is the port of Calingapatam, a former centre of the Kalinga dynasty, now a pleasant seaside resort.

509 m. Vizianagram (R.), the chief town of one of the most extensive Zemindari estates in India, and once included in the Kalinga kingdom. The town (population 37,550), founded in

1712, adjoins the small station on rising ground. The fort (1 m. distant) is almost entirely occupied by the *Palace Buildings*, etc., of the Maharaja. The place, which is 16 m. from the sea, is a rising one. Half-way between the fort and station is a large tank with a constant supply of water. The *Market* was built to commemorate the visit of King Edward, when Prince of Wales, to India in 1875. It was a Vizianagram force which, with French assistance, attacked Bobbili (the "Royal Tiger") in 1756, when, after putting the women to death, the Raja Ranga Rao fell sword in hand in accordance with the old Rajput tradition. Not long after four of his old retainers murdered the Raja of Vizianagram.

It is proposed to construct a railway from Vizianagram N. to Sointilla, and thence (1) N.W. to Raipur (p. 119), and (2) N. to Sambalpur and Jharsuguda (p. 120) on the Bengal-Nagpur Railway.

From Vizianagram the Buddhist remains at *Ramatirtham*, recently excavated by the Archaeological Department, might be visited. There is a good road up to the foot of the hill.

547 m. Waltair junction station; short branch to Vizagapatam. From Waltair may be visited *Simhachalam*, with a temple on the hill, which is a very fine specimen of the Orissa style. The village is about 3 m. from the railway station on the B.N. Railway called Simhachalam. The Vizianagram Maharaja, who is the owner of the temple and of the village, provides all comforts of transport, lodging, etc., on previous arrangement being made with the Palace office, Vizianagram. There are fine gardens on both sides of the walk up the hill, which rises by gentle gradation. The temple bears inscriptions on almost all the pillars and walls. These date

from the 12th century A.D. As the place is malarious, a halt is not advisable. The great Vijayanagar King *Krishnaraya*, who was ruling Southern India in the beginning of the 16th century A.D. from his capital at Hampi, near Bellary, is said to have conquered the Kalinga country and to have set up a *pillar of victory* at, or near, Simhachalam. This pillar has not been traced.

Between Vizagapatam and Samalkot is the station *Anakapalli* on the M.S.M. Railway; and at a distance of about 2 m. from here is the village of Sankaram, where many Buddhist stupas and other interesting remains have recently been unearthed by the Archaeological Department.

2 m. Vizagapatam. * Vizagapatam, the chief town (population 43,413) of the district of that name, is a growing seaport, situated on a small estuary. The estuary forms the only naturally protected harbour on the Coromandel coast; the bar is too shallow, however, to admit vessels of deep draught, which have to anchor outside. Colonel Forde landed here in 1759, and drove the French from the Northern Circars. Most of the European residents live in the suburb of Waltair to the N. of the town, which stands on elevated ground composed of red laterite rocks. The manufacture of *panjam* cloth and ornamental articles of ivory, buffalo-horn, and silver filigree work, are specialities of the district. In the neighbourhood are sources of manganese, of which 125,000 tons are exported yearly.

18 m. N.E. of Vizagapatam is Bimlapatam (population 9314), a thriving port, where coasting steamers touch.

641 m. Samalkot station junction for (8 m.) Cocanada Town (Kakinada = "Crow Country") and (10

m.) Cocanada Port, connected with the Godavari River by navigable canals. Cocanada (population, 54,110) has no hotel, but there is a R.H. belonging to the Municipality. It is the principal port, after Madras, on the Coromandel coast. Ships lie in safety in the Roads (Coringa Bay), which, though shallow, are protected to the S. by a sandy promontory at the mouths of the Godavari. The jetties, wharves, and business houses are on the banks of a canal leading into the Roads. Trade of an annual value of 125 lakhs.

672 m. Rajamundry (Rajamahendri) (R.) (population 48,417) is the old seat of the Orissa Kings in the S. and of the Vengi Kings, and is regarded by the Telugus as their chief town. It contains a large jail, a museum, public gardens, and a provincial college. Historically it is chiefly interesting as the headquarters of N. Bussy from 1754-7, during which he held possession of the Northern Circars assigned to him by the Nizam. The Gorge, about 50 m. to the N.W., where the Godavari issues from the hills, should certainly be seen, as it forms one of the most beautiful pieces of scenery in Southern India—a succession of Highland lochs in an Eastern setting. A few miles down the river from Rajamundry are the head-works of the magnificent Godavari Delta Irrigation system, first designed by Sir Arthur Cotton; the *anicut*, or dam, is a huge piece of masonry, 4 m. in length from bank to bank, and is well worth a visit. In the middle of it is a pretty, well-wooded island.

676 m. Godavari. A splendid railway bridge of 56 spans of 150 ft. crosses the river here. This and the Krishna Bridge are among the finest engineering works in all India.

727 m. Ellore station (R.). Formerly capital of the Northern Circars. Ellore is now famous only for its carpets. The Godavari and Krishna Canal systems join here.

764 m. BEZWADA junction (R., D.B.), terminus of the Nizam's State Railway from Wadi, Hyderabad, and Warangal. Bezwada (population 32,867) is an important trading-place on the most frequented crossing of the Krishna River. A fort was erected here in 1760, but has since been dismantled. In making excavations for canals many remains were exposed, which show that the place was, in the Buddhist period, a considerable religious centre; and as such it was visited by Hiuen Tsang in 637 A.D. It is shut in on the W. by a granite ridge 600 ft. high, running N. and S., and ending in a scarp at the river. At right angles to this ridge, and $\frac{1}{2}$ m. from the stream, is a similar ridge sheltering the town on the N. Close to the E. end of N. ridge is a sharp-pointed detached mass of gneiss, on which are Buddhistic caves and cells. On the S. side of the river, opposite to Bezwada, is a hill similar to the W. ridge, of which it is a continuation. It is 450 ft. high, and from Bezwada seems a perfect cone. On the S. side of the river, 1 m. to the W., is the Undavilli Cave-Temple.

In the town are some old shrines with inscriptions from the 7th century downwards. The caves of Bezwada—unimportant—are hollowed out of the E. side of the great hill at the foot of which the town stands. At the Museum there is a colossal figure of Buddha in black granite, which came from the hill to the E. of Bezwada. The river is here crossed by a great dam, or *anicut*, 3715 ft. long and 20 ft. above the bed level. From both ends navigable canals

take off and irrigate about 800,000 acres of land.

A branch railway 49 m. long connects Bezwada with Masulipatam (Machhli-patnam or "Fish Town"; population 42,123), the headquarters and the principal port of the Krishna District. It was taken by the Bahinani Kings in the 15th century, and was afterwards held by the Golconda rulers. Masulipatam was early a principal settlement of the E.I. Company for trade on the E. coast. An English agency was established here in 1611, after the failure of that at Pulicat, and a factory eleven years later; the Dutch and French also had factories here. There are Dutch tombs dating from 1624. In 1690 a farman of the Delhi Emperor confirmed the English privileges; in 1750 the place was made over by the Nizam to the French, but was carried by storm by Colonel Forde on the night of 7th April 1759, 500 French and 2500 sepoy's surrendering. The attacking force comprised only 346 European troops and 1400 sepoy's—little more than half the strength of the defenders. This victory, one of the most brilliant ever accomplished by British arms, was the turning-point in the long conflict between French and English for the Empire of India. The fort is now dismantled. The chintzes of Masulipatam were once famous. The C.M.S. has an important centre here, with a college, affiliated to the Madras University.

Excursions from Bezwada.

(1) In order to reach Undavilli village it is necessary to cross the Krishna from Bezwada by the railway or *amicut*, and go 1½ m. up the course of the river above

and W. of Sitanagaram. There is a rock-temple of two storeys close to the village. Farther round the hill, in a recess to the S. and facing N., is the interesting five-storeyed Brahman excavation known as the Undavilli Cave. The upper storeys are all set back, one above the other, and there is no doubt the façade of the cave is meant to represent the exterior of some structural building. The lowest storey across the whole front has three rows of seven pillars partially hewn out. The second originally had four compartments; at the back of one of these is a shrine cell with an altar, and in another is a relief of Vishnu and his wives. The façade on the front here has a frieze of geese, and a cell at the left end one of elephants and lions. The third storey contains a hall 53 ft. by 36 ft., with a figure of Vishnu seated on the serpent Ananta, and of Narayana, 17 ft. long, resting on the great snake Shesha. The top storey consists of circular domes of the shape used in all Dravidian temples. The fifth storey, which was never completed across the whole front, is the lowest of all, to the right of the flight of steps up to the cave. The date of the excavation must be much the same as those of Mamallapuram (Route 36)—viz., 700 A.D.

(2) 17 m. W. of Bezwada by road is Amaravati, on the right, or S., bank of the Krishna River, once the capital of the Andhra kingdom. It is a place of much book interest to antiquarians as an ancient centre of the Buddhist religion, and the site of a great tope,¹ but scarcely anything remains *in situ* now, and what remains is not worth a visit. The beauty of the tope can be judged of from the splendid portions of

¹ See Fergusson's *History of Indian Architecture*, vol. 1, pp. 80, 112, 119-123, and *Tree and Serpent Worship*, and Dr J. Burgess's *Amaravati and Jaggayapetta Stūpas*, London, 1887.

it in the British and Madras Museums.

N. and N.W. of Amaravati are the sites of former diamond workings, all on the N. bank of the river.

Immediately S. of Bezvada is the Krishna Bridge, 1200 yards long outside abutments, with a depth of foundations 80 ft. below low water; it cost Rs.4,247,850.

810 m. Bapatla (R.).

850 m. Ongole (R.).

901 m. Bitragunta (R.).

923 m. Nellore (R.), chief town of the District, stands on the right bank of the *River Pennar*, 8 m. from its mouth (population 33,246). In the ruins of a *Hindu Temple* was found a pot of *Roman gold coins and medals* of the 2nd century. There are here Missions of the Roman Catholics, American Baptists, and Hermansburg Lutherans.

946 m. Gudur (R.). Branch to (52 m.) Renigunta (p. 478).

1010 m. Ponneri (R.).

1021 m. Ennur, still a popular week-end resort from Madras, on a large backwater. A furnished bungalow can, as a favour, be obtained, and other bungalows are available. There are good boating and bathing.

1032 m. from Calcutta is Madras Central Station.

ROUTE 26.

BOMBAY to MADRAS by Kalyan Junction, the Bhor Ghat, Karli, Hotgi Junction, Poona, Sholapur, Gulbarga, Wadi Junction, Raichur, Guntakal Junction, Renigunta Junction, Arkonam Junction, with excursions by road to Matheran, the Caves of Karli and Bhaja, and by rail to Ahmadnagar and Tirupati.

Rail 794 m. Mail train about 32 hours in transit. Fares—Rs.68, Rs.34, Rs.24.

For the journey as far as (34 m.) Kalyan junction station, see Route 2; from Kalyan the N.E. branch of the G.I.P. Railway goes up the Thal Ghat, whilst the S.E. branch ascends the Bhor Ghat and passes through Poona to Madras. The country below the Ghats as far S. as N. Kanara is known as the Konkan — that above the Ghats from the Godavari (formerly from the Vindhya mountains) to the S. as the Deccan, on the right hand (*cf.* "dextra") of one facing towards the sun rising in the East.

Proceeding by the latter branch, the first station is

38 m. Ambarnath, "Immortal Lord," a village of 300 inhabitants, which formerly gave its name to the Ambarnath Petha (Subdivision of a *Taluka*). It is now a village of the Kalyan *Taluka*, of the Thana District. 1 m. E. is the Temple of Ambarnath, in a pretty valley. It is an object of considerable interest as a specimen of genuine Hindu architecture, covered with beautiful designs, in which birds and the heads of the lion of the South are introduced.

The roof of the hall is supported by four richly-carved columns. The pediment of the doorway leading into the vimana (shrine) is ornamented with elephants and lions, and in the centre with figures of Siva. A curious belt of beautiful carving runs up each face of the vimana. An inscription inside the lintel of the N. door gives the date of the building of the temple as=860 A.D.

54 m. Neral station (R.). For Matheran leave the rail here, and ride or "dandi" up 8 m. in $1\frac{1}{2}$ hrs., or take the steam tramway (2 ft. gauge) to Matheran, 13 m. Fares—Rs. 4, 8 as. and R.I., 4 as.

Matheran, "the wooded head," or "mother forest," is an outlier of the Sahyadri range, varying from 2300 ft. to 2600 ft. above the sea-level, and is an agreeable airy summer resort for the people of Bombay. The crown of the hill where the station is situated forms a narrow undulating tableland running N. and S., thickly covered with small tree growth, with spurs separated by ravines on all sides, with precipitous slopes everywhere, sometimes 1500 ft. high, the spurs terminating abruptly in bluffs called "points." Among the finest of these are Porcupine, Hart, and Monkey Points to the N.W., from which Bombay Harbour can be seen, Chauk Point, the S. extremity, where the old road of ascent emerges: and several points on the E. from which Khandala and the Ghats are visible. The finest of all is *Panorama Point*, to the N. of the bungalows. The distance is a little over 4 m. The road leads through a thick jungle of beautiful trees, and about $\frac{1}{2}$ m. from *Panorama Point* comes to a point parallel with Porcupine Point, where a precipice descends abruptly 1000 ft. At 100 yds. from its termination the road goes quite round the brow of the peak, and affords an extremely beautiful panoramic view of the country

from which the point gets its name. To the left are Hart Point and Porcupine Point, at the N. and N.W. extremities of a promontory shaped like the head of a battle-axe. Between Matheran and Prabal the mountain sinks down abruptly to the plain. From *Panorama Point* the Eawa Malang Range, 10 m. long, with strange cylindrical or bottle-shaped peaks, is visible some 15 m. to the N.

The extreme W. end of this range is known as the "Cathedral Rocks." The huts of Neral village lie directly below, and beyond them is the curving line of the G.I.P. Railway. Bombay and its shipping may be seen from this point on a clear day under the evening light.

62 m. Karjat junction station. From here a short line runs S. (9 m.) to Campoli, but it is only used in the dry season. At Karjat the engine is changed for one much more powerful to ascend the *Bhor Ghat*, which begins 1 m. from Karjat. The gradient is 1 in 42, and even 1 in 37, and all the trains are furnished with powerful brakes. The line first rises up the slope of the long spur which ends in the hill called Londgiri, which encloses the N. side of the Campoli Valley, in which is situated the Power-House for the Tata Hydro-Electric Works, and at the height of 1000 ft. passes by a tunnel to another wooded valley on the N., which soon terminates in an extremely fine and beautifully-wooded ravine. Along the S. side of this the line proceeds to the Reversing Station, 1350 ft. above the sea, situated on an elevated spur, affording grand views of the ravine all the way. From the station which, by a projected realignment, will soon be abandoned, can be seen the curious sheer rock called "the Duke's nose," and by the people Nāgphudi (the Cobra's Hood). In the rains innumerable waterfalls may be seen shooting and streaming down the ravine

sides, several near the head of it being very grand; and at all times of the year this part of the Ghat is extremely beautiful, and should certainly be visited. Indeed, the series of precipitous hillsides of sheer rocks form in the monsoon almost a continuous waterfall, surrounded by vivid green vegetation. From the Reversing Station the line winds round again to the E. side of the Campoli Valley, and makes its way round the crest of the tableland to Khandala, which stands at the head of the ravine, and is visible as the train ascends. The length of the ascent is nearly 16 m., over which there are twenty-six tunnels, with a length of 2500 yds., eight viaducts, and many smaller bridges; the actual height accomplished by the ascent is 1850 ft., and the cost of constructing the line was nearly £600,000. The Power Station of the Tata Co. is situated at the foot of a fall of some 1700 ft. by which the water from the lakes at the top, near Lonauli, descends in mighty steel pipes, lying on the rocks at a steep angle, in successive stages. Here five huge turbines generate a current at 5000 volts, transformed in the station to a pressure of some 40,000 volts, soon to be increased to 60,000, which is conveyed by six wires on ironwork towers to Bombay, a distance of some 70 m., where it supplies mills, tramways, and light.

78 m. Khandala * (Public Works Department Bungalow, for the use of officials on tour). This beautiful village is a favourite retreat for the inhabitants of Bombay from the distressing heat of the summer months. The site is well chosen: it overlooks the great ravine, the sheer depth of which is in great part concealed by luxuriant trees. Above the head of the ravine, to the S. is the magnificent hill called the Duke's Nose, whence is a fine view over the Konkan.

The ascent is by the S. shoulder, and is very steep. There is a *Convalescent Home* at Khandala in connection with the European General Hospital, Bombay.

The *Waterfall* on the right side of the ravine, near its head, is very fine in the rains, the upper of the two falls into which it is divided having a clear leap of 300 ft.

80 m. Lonauli station * (R.). Here are the G.I.P. Railway Company's School and Church, and a large European community of railway servants. The storage and head-works of the Tata Electro-Hydraulic Scheme for Bombay are situated at Lonauli (p. 21). A traveller desiring to see the great cave at *Karli* (7½ m.) and the caves of *Bhaja* (6½ m.) should, unless he is prepared to walk 8 m. to 10 m. (and even then the trains which stop at Malavli station may not prove very convenient), arrange to make the expedition from Lonauli by tonga, which in fair weather can go off the Great Trunk Road S. to the Malavli station, ¾ m. distant from the caves of Bhaja, and N. to the base of the rocky ridge of the Karli cave. At ordinary times, therefore, one can drive comfortably to the foot of the Karli cave and nearly to Bhaja. The ascent to the former is nearly 400 ft. by a good path, with a fairly easy gradient; if a pony is desired for this, it must be sent out from Lonauli.

85 m. Malavli station * (District Bungalow, for the use of officials on tour). The *celebrated cave* is on a hill about 4 m. from the station.

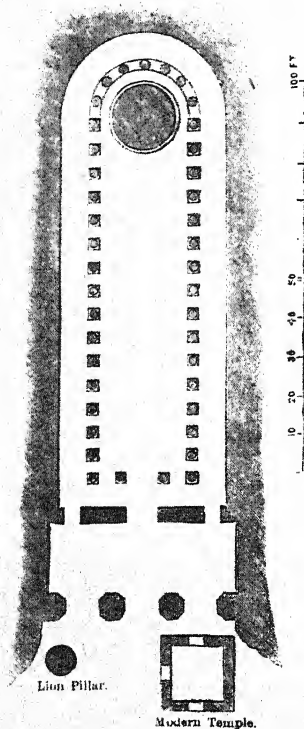
The following is an abstract of Mr Fergusson's description of it: ¹ "The cave of Karli is certainly the largest, as well as the most complete, chaitya cave in India, and was excavated at a time

¹ *Rock-cut Temples of India*, p. 27. See also *Indian Architecture*, 1, 142.

when the style was in its greatest purity, and is fortunately the best preserved. Its interior dimensions are 124 ft. 3 in. in total length, 81 ft. 3 in. length of nave. Its breadth from wall to wall is 45 ft. 6 in., while the width of the central aisle is 25 ft. 7 in. The height is only 46 ft. from the floor to the apex." The same writer says: "The building resembles an early Christian church in its arrangements, while all the dimensions are similar to those of the choir of Norwich Cathedral." The nave is separated from the side aisles by fifteen columns with octagonal shafts on each side, of good design and workmanship. On the abacus which crowns the capital of each of these are two kneeling elephants, and on each elephant are two seated figures, generally a male and female, with their arms over each other's shoulders, but sometimes two female figures in the same attitude. The sculpture of these is very good, and the effect particularly rich and pleasing. Behind the altar are seven plain octagonal piers without sculpture, making thus thirty-seven pillars altogether, exclusive of the Lion Pillar in front, which is sixteen-sided, and is crowned with four lions with their hinder parts joined. The dagoba is plain and very similar to that in the large cave at Ajanta, but here, fortunately, a part of the wooden umbrella which surmounted it remains. The wooden ribs of the roof, too, remain nearly entire, proving beyond doubt that the roof is not a copy of a masonry arch; and the framed screen, filling up a portion of the great arch in front, like the centring of the arch of a bridge (which it much resembles), still retains the place in which it was originally placed. At some distance in advance of the arched front of this cave is placed a second screen, which exists only here and at the

great cave at Kanheri, though it might have existed in front of the oldest chaitya caves at Ajanta. It consists of two plain octagonal columns with pilasters. Over these is a deep plain mass of wall, occupying the place of an entablature, and over this again a superstructure of four dwarf pillars. Except the lower piers, the whole of this has been covered with wooden ornaments; and, by a careful examination and measurement of the various mortices and footings, it might still be possible to make out the greater part of the design. It appears, however, to have consisted of a broad balcony in front of the plain wall, supported by bold wooden brackets from the two piers, and either roofed or having a second balcony above it. No part of the wood, however, exists now, either here or at Kanheri. It is more than probable, however, that this was the music gallery or Nakkar Khana, which we still find existing in front of almost all Jain temples, down even to the present day. Whether the space between this outer and the inner screen was roofed over or not is extremely difficult to decide. To judge from the mortices at Kanheri, the space there would seem to have had a roof; but here the evidence is by no means so distinct, though there is certainly nothing to contradict the supposition. There are no traces of painting in this cave, though the inner wall has been plastered, and may have been painted; but the cave has been inhabited, and the continued smoke of cooking-fires has so blackened its walls that it is impossible to decide the question. Its inhabitants were Saivites, and the cave was considered a temple dedicated to Siva, the dagoba performing the part of a gigantic lingam, which it resembles a good deal. The outer porch is 52 ft. wide and 15 ft. deep. Here originally the fronts of three

elephants in each end wall supported a frieze ornamented with a rail pattern, but at both ends this has been cut away to introduce figures. Above was a thick quadrantal moulding, and then a



Cave at Karli.

rail with small façades of temples and pairs of figures.

"It would be of great importance if the age of this cave could be positively fixed; but though that cannot quite be done, it is probably antecedent to the Christian era; and at the same time it cannot possibly have been excavated more than 200 years

before that era. From the Sinhashambha (lion pillar) on the left of the entrance Colonel Sykes copied an inscription, which Mr Prinsep deciphered in vol. 6 of the *Journal of the Asiatic Society*. It merely says: 'This lion-pillar is the gift of Ajmitra Ukas, the son of Saha Ravisabhoti'; the character, Mr Prinsep thinks, is of the 1st or 2nd century B.C. From its position and import, the inscription appears to be integral, and the column is certainly a part of the original design. I am inclined to think the date, 160 B.C., is at least extremely probable.

"It would be a subject of curious inquiry to know whether the woodwork now existing in this cave is that originally put up or not. Accustomed as I had long been to the rapid destruction of everything wooden in India, I was half inclined to be angry when the idea first suggested itself to me; but a calmer survey of the matter has convinced me that it is. Certain it is that it is the original design, for we find it repeated in stone in all the niches of the front, and there is no appearance of change or alteration in any part of the roof. Every part of it is the same as is seen so often repeated in stone in other and more modern caves, and it must, therefore, have been put up by the Buddhists before they were expelled; and if we allow that it has existed 800 or 1000 years, which it certainly has, there is not much greater improbability in its having existed near 2000 years, as I believe to be the case. As far as I could ascertain the wood is teak. Though exposed to the atmosphere, it is protected from the rain, and has no strain upon it but its own weight, as it does not support the roof, though it appears to do so; and the rock seems to have defied the industry of the white ants."

The principal viharas at Karli to the right of the entrance to the

chaitya are three tiers in height. They are plain halls with cells, but without any internal colonnades, and the upper one alone possesses a veranda. The lower fronts have been swept away by great masses of rock which have rolled from above. To the left of the chaitya are some smaller viharas and cisterns.

The Caves of Bhaja and Bedsa.¹—Bhaja is a village $\frac{3}{4}$ m. S. of Malavli railway station, and Bedsa is $5\frac{1}{2}$ m. E. of the Bhaja. The caves of Bhaja date from 200 B.C. There are eighteen excavations, of which the Chaitya No. 12 is one of the most interesting in India. It contains a dagoba, but no sculptures, and has its roof supported by twenty-seven sloping pillars. Outside there is a group executed in bas-relief, now much defaced, and marks show that a wooden front was once attached to the great arch. On both sides of the chaitya the hill has been excavated into the usual halls of instruction, with cells. A little way to the S. is a curious collection of fourteen dagobas, five of which are inside and the others outside a cave. On the first of the latter there is an inscription. The last cave to the S., some way beyond the others, is a vihara $16\frac{1}{2}$ ft. by $17\frac{1}{2}$ ft., decorated with excellent and interesting sculptures, including one of a prince on an elephant and another of a prince in his chariot, and three armed figures. The caves at Bedsa lie about 4 m. S.E. from the station beyond Malavli, and date a little later than Bhaja. The plan of the chaitya resembles Karli, but is neither of so great extent nor so well executed, and appears more modern. It contains a dagoba; and its roof, which is ribbed and supported by twenty-six octagonal pillars 10 ft. high,

seems to have been covered with paintings, which are now, however, so indistinct that nothing can be made out of them. There are four pillars about 25 ft. high in front, surmounted by a group of horses, bulls, and elephants, with a male and female rider upon them. These groups resemble those found on the Indo-Mithraic coins of the N. The hall of instruction has an apsidal end and a vaulted roof, and is situated close to the left of the chaitya. It contains eleven small cells, and over the door of one of them there is an indistinct and partly defaced inscription.

96 m. Wargaoon station, a very large and flourishing village, celebrated for the defeat of a British force under Lieutenant - Colonel Cockburn, on the 12th and 13th of January 1779, and for a convention concluded there by Mr Carnac with the Mahrattas. Wargaoon forms the headquarters of a native official called a *mamlatdar* (tahsildar), who is also a magistrate.

116 m. Kirkee station is only $3\frac{1}{4}$ m. from Poona, and may be considered part of the same place. It is interesting as being the scene of a splendid victory over Baji Rao II., the last Peshwa. On the 1st of November 1817 the dispositions of that Prince had become so threatening that Mr Elphinstone, then Resident at Poona, determined to remove the troops from the Cantonment of that place to Kirkee, where, on the 5th, they took up a good position to the E. of an eminence, on which the village of Kirkee stands, and where the stores and ammunition were stationed. In the rear of the troops was the River Mula, and from the S. and W. advanced the masses of the Peshwa's army, amounting to 8000 foot, 18,000

¹ A full account of these places will be found in *Cave Temples of India*, pp. 223, 228.

horse, and 14 guns,¹ besides a reserve of 5000 horse and 2000 foot with the Peshwa, at the sacred hill of Parbati (p. 471). The Cantonments at Poona and the Residency at the Sangam (or meeting of the rivers) had been plundered and burnt on the 1st as soon as the British troops quitted them. One regiment, commanded by Major Ford, was at Dapuri, N. of Kirkee, and the total strength of the English, even when it joined, was, according to Grant Duff, but 2800 rank and file, of which 800 were Europeans.

Bapu Gokhale, who had been a favourite of the Duke of Wellington, commanded the Peshwa's army. Its advance was compared by Grant Duff, an eye-witness, to the rushing tide called the bore in the Gulf of Cambay. Colonel Burr, who commanded the British, was now informed that Major Ford was advancing with his regiment from Dapuri, on the W., to join him; and in order to facilitate the junction he moved the main force to a position about a mile in advance, and to the S.W. of the village of Kirkee. The Mahratta leaders had been tampering for some time with the regiment, and they fully expected it would come over, as it was paid by the Peshwa. A strong body of horse, therefore, under Moro Dikshit, the Prime Minister of the Peshwa, advanced about 4 P.M. upon the Dapuri battalion, but Major Ford, throwing back his right wing, opened a heavy fire upon the Mahrattas, both of musketry and from three small guns commanded by Captain Thew. A good many Mahrattas fell, and among them Moro Dikshit. In the meantime Gokhale had organised an attack on the left flank of the British main force, and this was led by a regular battalion commanded by a Portuguese named De Pento; and after his discomfiture a select body of

6000 horse, with the Jari Patka, or golden pennon, flying at their head, charged the 7th Native Infantry as they were pursuing De Pento's men. Gokhale's horse was wounded in this charge, and his advance was stopped; but there were other gallant leaders—such as Naro Pant Apte and Mahadeo Rao Rastia—and it was well for the sepoys that a swamp in their front checked the charge of the Mahrattas, whose horsemen rolled headlong over one another in the deep slough. As it was, some cut their way through the sepoy battalion; but, instead of turning back, when they might have destroyed the regiment, they rode off to plunder the village of Kirkee, whence they were repulsed by a fire of grape. After this charge the Mahrattas drew off with a total loss of about 500 men, while that of the British was but 86. On the 13th General Smith's army arrived from Sirur, and the Peshwa, after a slight resistance, retreated with his army. The most remarkable point in the Battle of Kirkee was, perhaps, the extraordinary steadiness of Major Ford's regiment under great temptation. In it were upwards of seventy Mahrattas, yet not a man deserted on the day of battle, though promised vast sums to join their countrymen. After the action the Mahrattas, but only the Mahrattas, joined the enemy.

Kirkee is the headquarters of a brigade of *Field Artillery*. $\frac{1}{4}$ m. N.E. of the barracks is the *Small Arms Ammunition Factory*, and to the N. is the *Arsenal* (permission to enter either must be obtained from the officer in charge).

Christ Church, Kirkee, in the Artillery Lines, was consecrated in 1841. There are two colours of the 23rd Regiment Bombay Native Infantry inside the W. door. Amongst the memorial tablets is one to thirty officers of the 14th King's Light Dragoons, who died or were killed between

¹ Grant Duff, 3, 427.

1841 and 1859, and another to ninety non-commissioned officers of the same regiment.

N.E. of the Artillery Mess is *St Vincent De Paul's Roman Catholic Chapel*.

One of the most interesting spots at Kirkee, passed on the road to Poona, is *Holkar's Bridge*, over the Mula River, a stream which encircles Kirkee on the N., E., and S. In the floods of July 1912 this bridge was several feet under water. The river is 200 yds. broad at this spot. On the right of the road is an old English cemetery, and on the left, about 300 yds. to the N., is the New Burial Ground. After crossing the Mula the road passes on the right the chhatra of Khande Rao Holkar, and on the left are the Sappers' and Miners' Lines, and after them the Deccan College and the lines of a Regiment of Pioneers, right. Beyond these are the *Jamsetji Bund*, the *Fitzgerald Bridge*, and the *Bund Gardens*, for all of which, see below under Poona.

Government House is at Ganesh Khind, $1\frac{1}{2}$ m. S.W. of Kirkee railway station and $3\frac{1}{2}$ m. N.W. of the city of Poona. It derives its name from a small *khind*, or pass, between hills, about $\frac{3}{4}$ m. S.E. of the house, which resembles a modern French château, and has a tall, slim tower, 80 ft. high, from the top of which there is a fine view, including Kirkee, with its Arsenal, the Deccan College, and the Parbati Hill. The house contains the usual reception rooms, a ball-room, darbar-room, etc., and has a flower gallery, or garden corridor, 90 ft. long.

119 m. POONA, * junction of the G.I.P. and Madras and S. Mahratta Railways. The railway station is situated at a corner of the city and Cantonment,

and close to the public offices. Poona (lat. $18^{\circ} 31'$, long. $73^{\circ} 51'$; altitude 1850; population 158,856) is the residence of the Government of Bombay during the rains. It is the headquarters of the 6th Army Division and the former capital of the Mahrattas. The first mention of Poona is in the Mahratta annals of 1599 A.D., when the parganahs of Poona and Supa were made over to Malaji Bhonsla (grandfather of Sivaji) by the Nizam Shahi Government. In 1750 it became the Mahratta capital under Balaji Baji Rao. In 1763 it was plundered and destroyed by Nizam 'Ali, and here, on the 25th of October, Jaswant Rao Holkar defeated the combined armies of the Peshwa and Scindia, and captured all the guns, baggage, and stores of the latter. The city stands in a somewhat treeless plain on the right of the Mutha River, a little before it joins the Mula. At its extreme S. limit is the Hill of Parbati, so called from a celebrated temple of the goddess Durga, or Parbati, on its summit (see p. 471). A few m. to the E. and S.E. are the hills which lead up to the still higher tableland in the direction of Satara. The station is healthy and the climate pleasant. The *Aqueduct* was built by one of the Rastias, a family of great distinction amongst the Mahrattas. There are also extensive waterworks, constructed by Sir Jamsetjee Jeejeebhoy, which cost upwards of £20,000. Of this sum the Parsi baronet contributed £17,500. New waterworks and a drainage system have recently been constructed for the city, at a cost of some £150,000.

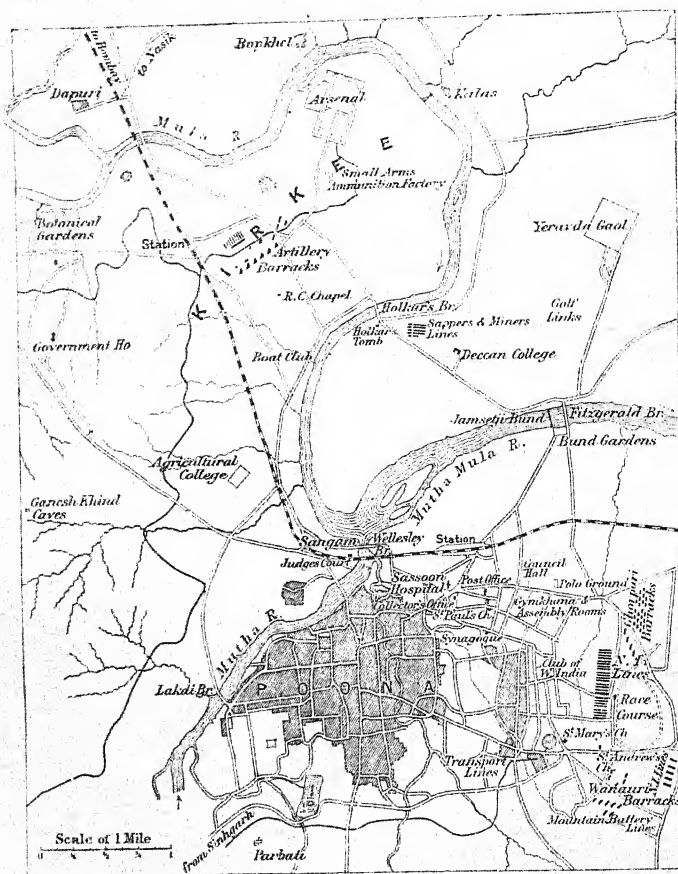
The Gymkhana Assembly Rooms, in the middle of the station, consist of a large building with a handsome ballroom, with a stage at one end for theatricals. In the grounds of the building are lawn-tennis courts, a covered Badminton

ton court, and a fine cricket-ground.

Near the Assembly Rooms, on the road to the Bund Gardens, is

Bahadur Pestonji Sorabji Framji Patel, the Crown Prince of Travancore, Sir Mangaldas Nathubhai, Dr Bhau Daji, the

POONA AND KIRKEE



the Council Hall, containing some pictures of interest, including those of Sir B. Frere, Lady Frere, Khan Bahadur Padamji Pestonji, Khan Bahadur Naushirwanji, Lord Napier of Magdala, Khan

Raja of Cochin, Sir Salar Jang, the Thakors of Bhaunagar and Morvi, and Khande Rao Gaekwar.

The Sassoon Hospitals, in the Gothic style, are at the end of the Arsenal Road. The total

number of beds is 226. This includes 49 beds in the Jacob Sassoon Hospital for Europeans and Jews. The latter hospital was built in commemoration of the visit of the then Prince and Princess of Wales to India in 1905-6. It was designed by the Consulting Architect to the Government of Bombay, and erected by the P.W.D. The total cost, amounting to over Rs.200,000, was borne by Sir Jacob Sassoon. The foundation-stone was laid by Lord Lamington, and the building was opened on the 15th March 1909 by Sir George Clarke (now Lord Sydenham). The nursing is carried on by the Hospital Nursing Association, supervised by the Wantage Sisters. There is a medical school for the training of sub-assistant surgeons attached to the hospitals.

Opposite the hospitals are the *Collector's Cutcherry* and the *Government Treasury*. Close by is a large and handsome building in grey stone, erected in 1915, to house the Government Offices. About 250 yds. S. of St Paul's Church is the *Jews' Synagogue*, a red brick building with a tower, 90 ft. high, consecrated 29th September 1867. *Mr David Sassoon's Tomb* adjoins the synagogue, which was built by him. The mausoleum is 16 ft. sq. and 28 ft. high.

1½ m. to the S.E., passing the Arsenal, is *St Mary's Church*, consecrated by Bishop Heber in 1825. Here tablets are erected to the memory of many officers of distinction, and recall stirring incidents in the history of India. The font, in the S.W. corner of the church, is surrounded by stained-glass windows.

E. of the church are the *General Parade Ground* and *Race-course*, the latter included in the former, and about 1 m. long. The Poona races are held from July to September. Close to it are the *Gymnasium*, *St Andrew's Church*,

and the *Masonic Lodge*; to the N. are the *Ghorpari Barracks*, and to the S. the *Wanauri Barracks* for British troops.

Two Scottish Missions (Free and Established Church), the American Mahratta Mission and C.M. Zenana Mission, are conducted in the city and suburbs.

The *Society of St John the Evangelist* has a native mission at Poona; the mission-house is at Panch Howds, Vetel Peit. There are boys' schools, an Industrial School, an Orphanage, a School for Catechists, and a Hospital.

The *Sisters of St Mary the Virgin* (Wantage) have also their mission-house at Panch Howds, and in the compound the Epiphany School for high-class native girls, and St Michael's School for low-class girls. The sisters have also under their charge St Mary's High School for European and Eurasian girls (self-supporting), a village school at Parbati, and another at Yerandawana, 1 m. from Poona.

The **Sangam** is the name given to the tongue of land at the confluence of the Mutha River, flowing from the S., with the Mula River, coming from the N.W., and is perhaps the most central spot of the combined city and Cantonments. Upon it are several temples, and from it are pleasant views of the river.

The **Wellesley Bridge**, 482 ft. long and 28½ ft. broad, crosses the Mutha River to the Sangam promontory, close to its confluence with the Mula. It takes the place of a wooden bridge erected to commemorate the victories of the Duke of Wellington in India. The present bridge, designed by Col. A. U. H. Finch, R.E., cost Rs.110,932, and was opened in 1875.

On the left hand, after crossing the Wellesley Bridge, are the

Judges' Court, the *Poona Engineering College*, and E. of it a long, low building on the site of the Residency of the British Agent, Mountstuart Elphinstone, at the time of the rupture with the last Peshwa, Baji Rao II. Mr Elphinstone retired from it to Kirkee before the battle, and the Mahrattas plundered the building and pulled it down. At the E. end of Wellesley Bridge is a path to the left, which leads down to a pretty garden filled with fruit-trees and containing several temples. The first has a tower 40 ft. high. In the middle of the garden is a second temple, nearly as broad but not so high. A third temple at the end of the garden was built by Holkar, who destroyed two other old temples to build it. All are dedicated to Mahadeo, and, though small, are extremely handsome. At 300 yds. from the Engineering College is Mr Bomanjee Dinshaw Petit's house, called Garden Reach. It was built between 1862 and 1864, and cost £80,000. Permission to view is usually granted on application when the family is not in residence. The gardens are beautiful, and extend along the banks of the river. The rooms in the principal house are floored with marble. The fine dining-room is connected with the house by a long, open gallery. Beside it is an open room, with sides of carved wood, where the Sassoon family, the former owners, used to dine during the Feast of Tabernacles. The ceiling of the drawing-room was beautifully decorated by Poona artists. In it is a full-length portrait of Mr David Sassoon, Sir Edward's grandfather. A fountain in the garden and the water-tower should be noticed.

From this it is a pleasant drive of $1\frac{1}{2}$ m. *vid* the Boat Club and Holkar's Bridge, to the *Jamsetji Bund* and the *Fitzgerald Bridge*. If the drive be extended so as to include the high ground adjoining

the Kirkee Arsenal, a very fine view is obtained of Poona and its surrounding hills. The *Bund* is of stone thrown across the Mula River, and on the S. side of it are the beautiful *Bund Gardens*, of 6 acres.

The view of the Fitzgerald Bridge from the *Bund Gardens* is very pretty; above it is the broad stream, 350 yds. wide, on which regattas take place, chiefly in February. Farther along in the direction of Kirkee (see above) is the Deccan College, built of grey trap-stone, in the Gothic style, at a cost of Rs.245,963, of which half was contributed by Sir Jamsetjee Jeejeebhoy. It was designed by Captain H. C. Wilkins, R.E., and consists of the central block, two storeys high, with two wings, forming three sides of a quadrangle, surmounted by a high-pitched iron roof coloured red. At the N.W. corner of the main block is a tower 106 ft. high. The wings are occupied by students, and the main building contains class-rooms and laboratory, with a large College Hall, 70 ft. long, above, used for the Library.

For a native town the streets of the City of Poona are wide, and some of the older houses are substantial and picturesque buildings. It is divided into nineteen divisions, called *peths*, some of them named after the days of the week on which the market was held. In Shukruwar Peth the United Free Church of Scotland Mission have built a fine up-to-date hospital, known as the N. M. Wadia Hospital, as the trustees of Mr Wadia contributed Rs.50,000 towards its construction. The Government of Bombay gave an equal amount as grant-in-aid. Amongst the industries of the town may be mentioned the making of gold and silver thread and wire for embroidery and for a simple kind of jewellery, the stringing of beads and berries for ornaments, and brass-work of all

kinds. In the Shanwar, or "Saturday," division, are the remains of the *Peshwa's Castle*, called *Junawada*, or "old palace"—a large enclosure about 180 yds. sq. It was built by the grandfather of the last Peshwa, and was a grand building, till burnt down in 1827. Only the massive walls remain. The doors are very large, and covered with iron spikes. Above the gateway is a small balcony supported on pillars. Here is the terrace from which, in 1795, the young Peshwa, Madhu Rao Narayan, threw himself, and died two days afterwards of the injuries he received in the fall. Here, too, in 1773, Narayan Rao was savagely murdered by two of his guard at the age of eighteen, after he had been but nine months Peshwa.

In front is an open space where a vegetable market is held. About 110 yds. to the N. is a stone bridge, over which a road leads to the village of *Bamburda* and the *Sangam*.

Not far from this castle is a street in which, under the Peshwas, offenders were executed by being trampled to death by elephants. One of the most memorable of these executions, on account of the princely rank of the sufferer, was that of *Wittoji Holkar*, brother of that *Jaswant Rao Holkar* who, the same year, won the *Battle of Poona*. The last of the Peshwas, *Baji Rao II.*, beheld the agonies of the victim from a window of his palace, where, on the morning of the 1st of April 1800, he took his seat with his favourite *Balaji Kunjar* in order to glut his eyes with the revolting sight.

In the *Budhwar*, or "Wednesday," quarter of the city are some old *Mahratta* Palaces and the quondam residence of the well-known Minister *Nana Farnavis*—a shabby mansion with a small courtyard and fountain and many small dark rooms and dingy passages.

The *Parbati Hill*, with its temples, is situated at the extreme S.W. of the town; the road to *Sinhgarh* leads to it past the *Hirabagh*, or "Diamond Garden." In a cemetery here, very well kept and shaded with trees, is interred the celebrated African traveller *Sir William Cornwallis Harris*, Major in the *Bombay Engineers*, who died in 1848.¹ The *Hirabagh* had a lake and island and the villa of the Peshwas, mosque, and temples, and was a charming place. *Lord Valentia* mentions it in his account of a visit to the Peshwa in 1804. The lake has been drained for sanitary reasons, and the building is occupied by a social club, which is open to members of all nationalities. The temple at *Parbati* was built by the Peshwa *Balaji Baji Rao*, who ruled from 1740 to 1761, but in honour, it is said, of the *Raja of Satara*. A long succession of steps and ramps leads up to the top of the hill and to the temples. At each corner of the first court are small shrines to *Surya* (the Sun), *Vishnu*, *Kartikkeya* (the Hindu Mars), and *Durga*; and in the centre is the principal temple dedicated to the goddess *Durga* or *Parbati*, the wife of *Siva*, so called from *Parbat*, "a mountain," as she is said to be the daughter of the *Himalaya*. In the temple is a silver image of *Siva*, with images of *Parbati* and *Ganesh*, of gold, seated on his knees. The temple and its approaches are said to have cost £100,000. During the *Diwali* it is lighted up in a beautiful manner. On the N.W. side of the enclosing wall is a picturesque Moorish-looking window, whence, it is said, *Baji Rao* watched the defeat of his troops at *Kirkee*. From the top of this wall, reached by narrow steps, there is an extensive view over *Poona*, *Kirkee*, and surround-

¹ He was the author of *Wild Sports in the West* and the *Highlands of Ethiopia*.

ing country, including Parbati Tank, to the E., and Parbativillage, S. of the tank, over the Hirabagh to St Mary's Church and the Jews' Synagogue, far to the N.E. To the S.W. is a ruined palace of the Peshwas, which was struck by lightning in 1817, the year of Baji Rao's overthrow by the British. A donation of R.1 may be given to the Brahman who shows the place, for the benefit of the temple and the numerous blind persons who frequent the hill. At the foot of the hill is a square field, which in the time of the Peshwas was enclosed by high brick walls. Here, at the end of the rains, about the time of the Dasahara, gifts in money were presented to all Brahmans. In order to prevent the holy men from receiving more than their share, they were passed into this enclosure, at the gate of which stood a vast cauldron filled with red pigment. Each as he entered was marked with this, and nothing was given till all had gone in. They were then let out one by one, and Rs.3, 4, or 5 were given to each. On one occasion the Peshwa is said to have lavished £60,000 in this manner. There are several other temples and shrines at the top of the hill.

About 6 m. from Poona is the Khondwa Leper Asylum, managed by the Mission to Lepers in India and the East, with the help of a Board representing the local bodies, under the Collector as *ex officio* President. The Lepers Act of 1898 has been applied to Poona. The asylum accommodates 200 lepers, and was opened in 1909.

15 m. S.W. from Poona is Sinhgarrh, a place very famous in Mahratta annals, and very interesting on account of its scenery as well as its historic recollections. On the road to it is passed the Khandakwasla reservoir of the Poona waterworks. The fort

was taken by the renowned Tanaji Malusre in February 1670.

"The loss of the assailants was estimated at one-third their number, or upwards of 300 killed or disabled. In the morning 500 gallant Rajputs, together with their commander, were found dead or wounded; a few had concealed themselves and submitted; but several hundreds had chosen the desperate alternative of venturing over the rock, and many were dashed to pieces in the attempt."

On the 1st of March 1818 Sinhgarrh was taken by the English without loss. The garrison, 1100 men, of whom 400 were Arabs, capitulated, after being shelled for three days, in which time 1400 shells and upwards of 2000 shot were fired into the place. The ascent to Sinhgarrh is in part almost perpendicular. Being 4162 ft. above the sea, it is delightfully cool, and the views are beautiful. There are several bungalows here usually occupied by summer visitors from Poona.

Purandhar is another hill fort to the S.E., about 17 m. as the crow flies, and 24 m. by road, from Poona. The upper and lower forts are situated more than 300 ft. below the summit, which is 4560 ft. above sea-level, and are protected by a perpendicular scarp. In March 1818 Purandhar was attacked and taken by the English column under General Pritzler (Blacker's *Mahratta War*, p. 241). It is still used as a convalescent depot for troops and a sanatorium for summer visitors. There is there a District Bungalow (for the use of officials on tour), and sportsmen may find panthers in the hills and deer and other game in the neighbourhood.

167 m. Dhond junction station (R.). A considerable European

community of railway servants is located here. There is a good refreshment-room at the station. The Dhond-Baramati light railway runs S. to Baramati, 8 m.

From this place the Dhond-Manmar State Railway runs N., joining the N.E. branch of the G.I.P. Railway at the latter place, 146 m. from Dhond.

The only place of importance on this line is (51 m.) **Ahmadnagar** station, usually called **Nagar** (R., D.B.), the third city of the Deccan (population 42,940), covering 3 sq. m., and founded in 1490 by Ahmad Nizam Shah Bahri, son of a Brahman of Vijayanagar, the first of the Muhammadan dynasty which ruled Ahmadnagar for 100 years. His territory was the only part of the W. coast to which the ravages of Portuguese piracy did not extend. They maintained a friendly intercourse for many years with Ahmadnagar. The power of that State extended over the greater part of Berar and the province of Aurangabad and some districts in Khandesh, Kalyan, and from Bankot to Bassein, in the Konkan. The fort, one of the finest and strongest in India, fell into Akbar's hands in 1600, after sustaining a celebrated siege under Chand Bibi, widow of 'Ali Adil Shah, of Bijapur, the "Noble Queen" of Meadows Taylor's novel. It was taken from the Nizam by the Mahrattas in 1760, after desperate fighting. In 1797 the fort was made over to Scindia by the Peshwa, from whom it was taken by General Wellesley, afterwards Duke of Wellington, on the 12th of August 1803. A tamarind-tree, under which the Duke of Wellington is said to have lunched, used to be pointed out on the S.W. side of the fort. It has been blown down.

The fort is in the centre of the Cantonment, $2\frac{1}{2}$ m. N.E. of the railway station. Close to it are

Christ Church and a R.C. Church. The European *Barracks* are 1 m. S.E. of it, and the N.I. Lines and D.B. are N.W. of it. The gate of the fort towards the Poona road is called the *Máliváda Darwaza*; and just outside it are the graves of two British officers who fell here when the place was stormed in 1803. The town, though flourishing and with good bazars, is now of no architectural interest. Ahmadnagar is an important station of the S.P.G., the American Mission, and Education Society, which have large schools and branch missions. 2 m. from the fort is the *Pariabagh*, or "fairy garden," an old Palace of the Nagar Kings, which has nothing attractive beyond historical associations.

Ahmadnagar is a station of the 6th (Poona) Division of the Southern Army, with a garrison of one British and two Indian Infantry Regiments, an Ammunition Column, and two Signalling Companies. There is also an important Breeding and Training Depot of the Army Remount Department. A large camp for German prisoners of war is situated in Cantonments.

The principal sight near Ahmadnagar is the Tomb of *Salabat Khan*, commonly called that of *Chand Bibi*, 6 m. to E., on a hill 3080 ft. high. The building is octagonal and of three storeys. Below is the crypt, in which are two tombs. There is no inscription.

The main roads of the District are suitable for motor traffic.

184 m. **Diksal** station, 3 m. beyond which the *Bhima* River is crossed.

234 m. **Barsi** Road station. From here a light railway leads N. to (86 m.) **Latur**, in H.H. the Nizam's dominions, and S. to

236 m. **Pandharpur** (population 28,550), on the right bank of the

Bhima River, with a very celebrated shrine to Vithoba, an incarnation of Vishnu. Immense crowds of pilgrims visit the temple at certain times, particularly in July, when the Ashadi Fair attracts 150,000 people. A pilgrim tax of 4 as. per head is levied on all pilgrims visiting Pandharpur at the time of the four chief fairs. This tax forms the main source of municipal income. The municipality spends considerable sums on arrangements for the sanitary safety of the town at the time of the fairs. At one time Pandharpur was a dangerous centre of cholera infection to the whole Presidency. The Local Government in the years 1910-1911 spent nearly 425,000 rupees in providing the town with a pure water supply, and serious cholera epidemics no longer occur. The scene on the Bhima River at the time of the pilgrimage is most animated and interesting. There are eleven ghats, or landing-places. In the centre of the town, on high ground, stands Vithoba's Temple, inscriptions on which show that portions of it were standing in the 14th century. There are numerous other temples in the town.

283 m. Sholapur station (D.B.) (population 89,424), capital of a Collectorate, and formerly protected by a small but strong fort, still in a fair state of preservation. It is of Muhammadan construction, and consists of a double line of lofty battlemented and towered walls, surrounded by a moat. In April 1818 General Munro marched against a body of Baji Rao's infantry, 4500 in number, with thirteen guns, attacked them under the walls of Sholapur, and routed them with great slaughter. The fort, after a short siege, surrendered. The Cantonment lay S.E. of the railway station, and there was once a strong force here, but the troops have been withdrawn.

The city, which lies N.E. of the railway station, presents few objects of interest. It has grown greatly in size and importance during the past thirty years, owing to the development of the cotton industry. It now has four spinning and weaving mills, and one spinning mill, with a total of 3324 looms and 226,710 spindles. The total capital invested is 74 lakhs.

Sholapur has fifty-two schools, including a Government High School, with 400 pupils. It is the headquarters of the American Mahratti Mission, which has several schools and also controls the Leper Asylum.

At about 3 m. N. of the city of Sholapur is the Ekrukh Tank, 6 m. in length, formed by a modern embankment of earth and rough stones, $1\frac{1}{2}$ m. long, which has been carried across the Adhin River. Three canals from it irrigate the surrounding country. It also supplies the city with an ample supply of water, brought by pipes and pumped by steam power into reservoirs.

292 m. Hotgi junction station (R.). From this point the Southern Mahratta Railway runs S. to Bijapur and Gadag junction (see Route 28).

353 m. Gulbarga station (D.B.). Gulbarga was the first capital of the Bahmani Kingdom of the Deccan (1347-1500 A.D.), but was abandoned by the ninth of the dynasty in 1432 in favour of Bidar (p. 505). It stands in an undulating plain, a somewhat dreary expanse of black soil, relieved by outcrops of limestone and thriving young plantations of trees. It is included in the Hyderabad State, and houses for the Nizam's officers and public offices have been erected on the *Maidan*, which stretches from the railway station to the city. The old fort in the background, black

with age, and the numerous domes with which the plain is dotted, also help to relieve the generally monotonous aspect. The Bahmani Kingdom, which was founded at the close of the reign of the Emperor Muhammad Tughlak Shah of Delhi (1325-1351), dissolved gradually into the five kingdoms of Bijapur, Golconda, Ahmadnagar, Bidar, and Berar, of which the last three came to an end with the 16th century and the first two struggled on against the Mughals till 1660 and 1672.

The outer walls and gateways and most of the old buildings of the Fort are in a very dilapidated condition. The *Citadel*, or *Bala Hissar*, has suffered least. On the top of it is a curious old gun, 26 ft. long, and having twenty pairs of iron rings attached to it, by which it used probably to be slung or lifted. Close by is an old Hindu temple, which has been converted into a mosque.

In the old fort is the *Jami Masjid*, one of the finest old Pathan mosques in India, built in the reign of Firoz Shah, and modelled after the great mosque of Cordova, in Spain. Visitors entering it are expected to take off their boots. According to Mr Fergusson, it measures 216 ft. E. and W. and 176 ft. N. and S., and consequently covers an area of 38,016 sq. ft. Its great peculiarity is that alone of all the great mosques of India the whole area is completely covered over. There is therefore no court, and the solid roof affords protection from the sun to all worshippers, while the light is admitted through the side walls, which are pierced with great arches on all sides except the W. This arrangement is so good both for convenience and architectural effect that it is

difficult to understand why it was never afterwards repeated. It stands in seemingly good repair after four centuries of neglect, and owes its greatness solely to its own original merit of design.

The *Talukdar's Court*, the *Judicial Offices*, and the *Treasury* of Gulbarga are located in the grand old Tombs in the Eastern quarter of the town. These tombs are huge square buildings, surmounted by domes 100 ft. high, and are the burial-places of the Kings who reigned here at the end of the 14th century. They are roughly yet strongly built, but with the exception of some handsome stone tracery, which has, unfortunately, been whitewashed, none of them contain exterior ornaments of any kind. The interiors are more elaborately finished.

Some little distance from these tombs is the shrine or *Dargah* of *Banda Nawaz*, or *Gisu Daraz* (accessible only to Muhammadans), a celebrated saint of the Chishti family (see p. 190), who came to Gulbarga during the reign of Firoz Shah in 1413. The present structure is said to have been erected in 1640 by one of his descendants during the reign of Mahmud 'Adil Shah. Shah Wali, Firoz Shah's brother, made many valuable presents to the saint, and gave him large *jagirs*, and built him a magnificent college close to the city. Some of his descendants still reside at his tomb. The shrine is much venerated by Muhammadans in this part of India, and none but true believers are admitted inside its portals. Close by are some buildings, consisting of a sarai, mosque, and college (*Madrasa*), said to have been erected by Aurangzeb, who visited Gulbarga on several occasions.

In the town is a bazar 370 ft. by 60 ft., adorned by a row of sixty-one Hindu arches, with a very ornamental block of buildings at either end.

370 m. Shahabad station (R.). known for its limestone quarries. Large quantities of the stone are exported.

376 m. Wadi junction station (R.). From here the Nizam's State Railway runs E. to Hyderabad, Secunderabad, Warangal, and Bezwada (Route 29). Passengers for it change carriages.

427 m. Krishna station. Here the railway crosses the Kistna (= Krishna) River by a grand bridge 3854 ft. long.

443 m. Raichur station (R.). At this point the G.I.P. Railway and the Madras and S. Mahratta Railway N.W. Branch Railway meet. Madras is distant 350 m.

Raichur formed part of the dominions of the Bahmani Kings in 1357. It was included in the government of Bijapur, and was governed in 1478 by Khwaja Jahan Gawan. When Bijapur became an independent kingdom Raichur was its first capital. The *Fort* is about $1\frac{1}{2}$ m. from the railway station. The N. gate, flanked by towers, is best worth attention. There is a stone elephant, not quite the natural size, carved out of a boulder about 50 yds. outside the gate. At right angles to this gate is another called the Kasba Darwaza. Outside the latter is the door of a tunnel, out of which the garrison could come to close the gate, and then retire by the underground passage into the fort. The W. gate is called the Sikandaria, and near it is the old palace, with immensely thick walls—now a jail.

The *Citadel* should be seen for the sake of the fine view, extending as far as the Tungabhadra River, 16 m. to the S., and the Krishna, 12 m. to the N. The ascent commences from near the N. gate. The hill on which it is built consists of immense boulders of rock, and is over 290 ft. high. The path up

is broken and unsafe after dark. On the left is a row of cells belonging to the *dargah*, or shrine, and at the E. end, overhanging the precipice, is a stone pavilion. Near this, on the E., is a mosque 18 ft. high; and on the S. side is a place for a bell or gong 7 ft. high, with stone supports and a stone roof. The whole surface of the top is 70 ft. sq. The town is to the E. of the fort.

486 m. Adoni station (Adwani—population 31,645). This is one of the principal cotton-marts in the Deccan. The town is of some historical interest. According to tradition, it was founded 3000 years ago by Chandra Singh of Bidar. After the Battle of Talikota in 1565 the Sultan of Bijapur appointed Malik Rahman Khan, an Abyssinian, to govern it, which he did for 39 years, and died there. His tomb on the Talibanda Hill is still an object of religious veneration. He was succeeded by his adopted son, Sidi Mas'ud Khan, who built the lower fort and the fine Jami Masjid. In 1690 Adoni was taken, after a desperate resistance, by one of Aurangzeb's Generals, and afterwards fell to the Nizam. Salabat Jang granted it in *jagir* to Basalat Jang, his younger brother, who made it his capital, and endeavoured to form an independent State. He died in 1782, and was buried at Adoni, and a fine mosque and tomb were erected over his grave and that of his mother. In 1786 the citadel was captured by Tipu Sultan after one month's siege. He demolished the fortifications, and removed the guns and stores to Gooty. In 1792 it was restored to the Nizam, and exchanged by him with the British in 1799 A.D. for other places. The citadel is built on five hills, two of which rise 800 ft. above the plain. Half-way up the rock is a fine tank containing good water, and never dry.

518 m. **Guntakal** junction station (R.). From this junction the line runs S.E. to Madras, S. to Bangalore, N.E. to Bezwada, and W. to Bellary, Hospet (for Vijayanagar), and Goa (see Route 30).

536 m. **Gooty** station (R.). Nearly 2 m. S. of the railway station is its famous hill fortress, built on a precipitous mass of bare rock, which towers hundreds of feet above the surrounding rocks. It was the stronghold of Morari Rao, the ally of Clive at Arcot in 1751. It is approached by a long, winding, paved pathway, which leads to the summit of the fortress. It was taken by Hyder 'Ali in 1776, after a siege of nine months. The water failed, and the garrison were forced by thirst to surrender. The fort is 950 ft. above the plain and 2105 ft. above sea-level. At the foot of the path leading to the citadel is the European Cemetery, where rested for a short time the body of Sir Thomas Munro, who died at Pattikonda, in Kurnool, on the 6th February 1827. His remains now lie in the fort at Madras, but a cenotaph stands in this cemetery, where there are also other graves of interest. There is a native R.H. in the town, erected by Government to the memory of Sir Thomas Munro, at a cost of Rs.33,000.

566 m. **Tadpatri** station (R.). The town was founded during the time of the Vijayanagar Kings, about 1485, when the highly decorative temples of Rameswaraswami and Chintalarayaswami were built. They are about 2 m. from the railway station. The one on the river-bank was never finished, but is the most imposing. Fergusson (*Ind. Arch.*, I, 403, pictures on pp. 405-6) writes: "The wonders of the place are two gopurams belonging to the second (the Rameswara), which is now a

deserted temple on the banks of the river, about a quarter of a mile from the other. One of these was apparently quite finished; the other on the North never carried higher than the perpendicular part. In almost all the gopurams of India this part is comparatively plain, all the figure-sculpture and ornament being reserved for the upper, or pyramidal, part. In this instance, however, the whole of the perpendicular part is covered with the most elaborate sculpture, cut with exquisite sharpness and precision, in a fine close-grained hornblende (?) stone, and produces an effect richer, and on the whole, perhaps, in better taste, than anything else in this style." These two large gopurams are perhaps the finest architectural works executed during the Vijayanagar dynasty.

632 m. **Cuddapah** station (R.) is one of the ceded districts. The headquarters of Cuddapah town (population 17,807) is on the M. and S.M. Railway main line, 162 m. from Madras. It was formerly the capital of the Nawabs of Cuddapah, local Chiefs of some importance in the latter half of the 18th century. Situated between the Mahrattas, the Nizam, and Mysore, they were gradually crushed, and finally were re-absorbed by the Hyderabad State. In 1799 the Cuddapah, Kurnool, and Bellary Districts were ceded to the E.I. Co., and Sir Thomas Munro was appointed the first Collector of all three. Cuddapah town contains the usual municipal buildings, including a R.H. The district is hilly, and has a large area of forests. Places of interest, historical and archaeological, are few, the principal being Gandikota and Siddhavattam Forts (railway stations, Kondapuram and Vontimetta respectively). There are R.Hs. at both. The W. taluks are noted

for their ground-nut and cotton crops; while in the Penneru River bed, near Cuddapah, are grown the melons for which the district is famous.

Jammalamadugu (14 m. from Muddanuru station) is the headquarters of the London Mission in the ceded districts. There is only a very small thatched R.H. of the D.P.W. there. Owing to the many broad and unbridged streams in the district the roads are not suited to motor traffic. Persons travelling in the District would have to make their own arrangements for meals at R.Hs.

710 m. Renigunta station (R.), junction of the Metre-gauge State Railway (1) N.E. to Gudur (p. 460) and (2) S. and S.E. to Tirupati, Vellore (p. 536), and Villupuram.

8 m. Tirupati station * (D.B.). This town, of 16,701 inhabitants, crowded at all times with pilgrims, is celebrated for one of the most sacred Hill Pagodas (Sri Venkateswara Perumal) in S. India; it stands at the top of the "holy hill" called *Tirumala*, and is about 8 m. from the railway station. Wooden and brass idols are a speciality of the lower town. A conveyance takes one to the foot of the hill, where there are two fine gates, from which the ascent is made in a dooly carried by bearers. It is well to obtain an introduction to the Mahant from the Collector of the Chittoor District. There are several gopurams on the ascent visible from below. The antiquity of the temple is indisputable, but its origin is involved in obscurity. The idol is an erect stone figure 7 ft. high, with four arms, representing Vishnu. In the temple at Upper Tirupati are copper statues of the Vijayanagar King Krishnaraya and his two Queens, and of Venkatapatiraya. No European ascended the hill till 1870,

when the Superintendent of Police, in spite of the remonstrances of the Mahant, went up in search of an escaped forger. It is 2500 ft. high and quite bare, and has seven peaks. On the seventh peak, Sri Venkataramanachellam, is the pagoda, surrounded by a broad belt of mango, tamarind, and sandal trees. In front of it is a Hall of 1000 Pillars, which cannot, however, compare with that at Madura or those at Chidambaram or Conjeeveram. A picturesque stepped way leads from it to the temple gate, which is a fine one; admission to the temple is not granted. E. of the temple is a tank, and a bungalow, belonging to the Mahant, for the accommodation of European visitors.

14 m. Chandragiri station. After the defeat of Talikota in January 1565 the capital of the Rajas of Vijayanagar was for a time at Penukonda, and was subsequently changed to Chandragiri. It was taken from them by the Golconda Ruler in 1646, and was occupied by the Nawab of Arcot in 1750 and by Hyder 'Ali in 1782. In the palace here one of these, Sri Ranga Raya, in 1639, made to the East India Company the original grant of the land on which Fort St George (Madras) was built. The Government carefully preserve the palace, and it is used as an official residence. It is most picturesquely situated in the fort, and at the back of it is a high, rocky hill. The best way to visit it is to drive from Tirupati and join the train at Chandragiri.

78 m. Vellore station (Route 32).

272 m. Villupuram station.

From Renigunta station the line continues S.E. to

751 m. Arkonam junction station (R.). The N.W. and S.W.

branches of the Madras and S. Mahratta Railway join at this point, and a branch of the South Indian Railway runs S. to Conjeeveram and Chingleput (Route 32 (b)).

765 m. from Bombay is Tiruvalur station, 30 m. by road from Madras. There is a large Vaishnava temple here; and 4 m. from the station is the site of the old fort of Tripasore, which was captured by Sir Eyre Coote in 1781. Tripasore Fort was at one time the station for the East India Company's cadets, and afterwards for pensioners. There is a Travellers' Bungalow, without servants or furniture.

794 m. from Bombay is Madras central station (p. 555).

ROUTE 27.

POONA to GOA by Wathar Satara, Miraj, Belgaum, Londa, the Braganza Ghat, and Mormugão, with excursion by road to Mahabaleshwar, and rail to Kolhapur.

Poona (see p. 467). The Madras and Southern Mahratta Railway branches S. from the G.I.P. 2 m. E. of the station. Passing through three hill ranges, it reaches

69 m. Wathar station * (R.).

Passengers leave the train here for Mahabaleshwar, the principal hill station of the Bombay Presi-

dency, about 40 m. distant by road to the W.

Motors, carriages, and tongas can be had at Wathar by giving notice to the mail contractor at Mahabaleshwar (see the Index, under the word "Wathar"). Motors can be hired also direct from Poona. It is a charming drive of about five hours, the first part through rolling country to

20 m. Wai (D.B.) (population 10,544), one of the most beautiful towns in the Deccan. It is situated on the left bank of the Krishna, which is lined with fine pipal and mango trees, and with handsome flights of stone bathing-ghats. Behind the city rise hills of all the shapes which are peculiar to the mountains in the Deccan. One hill, 4 m. to the N.W., rises very abruptly, and has a hill fort on the top; it is called Pandavgad, according to the tradition that Wai is the Vairatnagar visited by the Pandavas (Introd. p. lxxii). The nearest temple to the D.B.—and the river is lined with beautiful temples—is dedicated to *Ganpati*; the next to *Mahadev*; and one, at some distance, to *Lakshmi*. They form the great beauty of this most picturesque spot. The *mandapam*, or canopy, in front of Mahadev's temple, is very light, and a fine specimen of carving in stone. Wai is a spot much famed in Hindu legend. Here, according to old tradition, the Pandavas spent part of their banishment and performed many great works (Introd. p. lxxii). On this account, as because of its proximity to the Krishna River so near its source, Wai is viewed as a place of great sanctity; and there is a Sanskrit school established at it, once in much repute.

The most curious thing to be seen near Wai is a gigantic *Banyan-tree*, at the foot of a mountain called Wairatgad, about 8 m. distant, near the village of Mhasve, and 2 m. off the road. The exact

area shaded by it is three-quarters of an acre. The space covered is a very symmetrical oval. There is no brushwood underneath, nor ought to impede the view save the stems of the shoots from the parent tree (see p. 93).

On leaving Wai the road begins a steep ascent to

28 m. Panchgani, a very large village, containing many bungalows belonging to Europeans, with nice plantations about them. In fact, many visitors who come to the hills prefer to stop at Panchgani rather than Mahabaleshwar, because the rainfall is less, and the place can be made a permanent residence. From Panchgani the road descends a little for one-third of a mile; the country round is covered with low jungle and patches of cultivation.

About 1 m. from Mahabaleshwar village, the small lake made by the Raja of Satara is passed on the right; it winds picturesquely, and is about 80 yds. long, and not quite 200 yds. broad.

Mahabaleshwar, 40 m. from Wathar station, is the hill station of the Bombay Presidency. There are two seasons—April and May and after the rains to October. During the season mail motors run from Wathar M.S.M. Railway, and antiquated phaetons run during the fair season at all times (apply Burjorji Pirozshah Mahabaleshwar; for mail or other motors, Frenchman, Mahabaleshwar). Many people go up direct from Poona in motors (75 m.). In the fair season the climate is at all times delightful, especially from October to March. April and May are distinctly hot, with cool nights. In June mists come on, and every one flees the hill to escape the torrential rains (from 150 in. to 400 in.) which fall till the beginning of October.

October is a very pleasant month, and the vegetation is seen at its best. Christmas is a favourite season, and the climate usually dry and invigorating. The general height of the plateau is from 4000 ft. to 4500 ft., with an abrupt descent to the E. of 2000 ft., and to the W. of from 3000 ft. to 4000 ft. In clear weather the sea can be seen, which is in a direct line only about 30 m. W. The plateau is heavily wooded with evergreen jungle, closely preserved by the Forest Department, but there is an absence of big trees. There are various view points and places of interest shown on the Government map of the Mahabaleshwar Plateau, but the waterfalls will be found distinctly disappointing, except after heavy rains. Orchids and lilies flower in April and May, and ferns and general vegetation are seen at their best in October, in which month butterflies abound.

There are several hotels—very full in the season (Race View and Ripon may be mentioned); there is also a nice Club with a few bachelor quarters, and numerous furnished bungalows can be rented for the season.

The chief view points and expeditions are Elphinstone Point and Arthur's Seat (fine views of the abrupt descent into the Konkan); Old Mahabaleshwar, with a very sacred and much overrated temple, from which the Krishna is said to rise; Connaught Peak, with fine view of the Plateau; Lodwick Point, with view of Partabgad; Bombay Point, with perhaps the finest view of all; and Kate's Point; the Falls of the Yenna to E. and the Dhobi's Waterfall to W.—all these can be followed on the map.

There are perfect roads and excellent walks and rides. Golf, polo, tennis, etc., can be played, and there is a good library and reading-room at the Frere Hall. The height of the season is in

April and May, when the hill is usually very crowded.

Good vegetables are grown, and in the season strawberries can be had.

Panthers are common, and tigers are occasionally found on the plateau; but the ordinary visitor is hardly likely to get any shooting. The plateau is very extensive, and this hill station compares favourably in this respect with the cramped Himalayan hill stations. Its proximity to the sea makes the climate far cooler and more equable than, from its elevation and latitude, one would be led to suppose. The scenery, especially the view to the W., looking down upon the Konkan or narrow strip between the ghats and the sea, is very impressive, though it lacks the grandeur of the Himalayas.

The best conveyance is a tonga with two ponies, which can be obtained locally: riding-horses cannot be hired; rickshaws are unknown. Motors are not permitted to drive round the roads, and are restricted to the journey up and down—a very proper restriction, as driving and riding are the favourite means of getting about.

Pratapgad (D.B.) is a picturesque hill fort crowning a precipitous rock remarkable as the stronghold of Sivaji and as the scene of one of the most remarkable events in Indian history—the founding of the Mahratta empire. A charming drive down the Fitzgerald ghat on the road to Mahad of about 9 m. leads to the foot of the hill, whence a steep path ascends to the gates of the fortress. Chairs are available at the D.B. Sivaji, having in 1656 provoked hostilities with Bijapur whose army he could not meet in the open, determined to overcome its General, Afzal Khan, by stratagem, and pretending to be in a state of great alarm at the approach of the Bijapur army to

besiege Pratapgad, offered to make his submission to Afzal Khan at a personal interview, on condition that the two commanders should meet unarmed, in the midst, between the two armies, with only one armed attendant. They accordingly approached from either side attired in white robes, apparently muslin; but Sivaji wore defensive mail under his robe and turban, and carried concealed in one hand a cruel weapon called a Wághnakh, “the tiger’s claws,” consisting of four sharp steel claws attached by rings to his fingers. In the very act of embracing the Khan in an attitude of humility, Sivaji drove these claws into him and tore out his vitals, and despatched him with a hidden dagger. His head was struck off and buried under the old tower in the fort. Meanwhile the Mahratta army, which had been concealed in ambush in the jungle, rushed out upon the Bijapur forces and cut them to pieces.

From Wathar station the railway line proceeds to

78 m. Satara Road station. From here it is a 10 m. drive by tonga or carriage to Satara (2320 ft. high; public motor-cars are always available; D.B.; population 20,944), situated in a hollow between two ranges of hills, which rise above it on the E. and W. and partly overlap it on the S. The hill on the W. is the termination of a spur from the Mahabaleshwar Hills. From this hill to the city water is conveyed 4 m. in pipes and there are also two fine tanks. The city has many historic recollections, and the station is one of the most salubrious and pleasant in the Deccan. The Cantonment is about $1\frac{1}{2}$ m. from N. to S., and nearly the same from E. to W. In the S. end is the Residency, inhabited by Sir Bartle Frere in

1849, originally built about 1820. Outside the N. gate of the old Residency were the British lines, the Indian lines and Sadr bazar lying N. of them.

The ruling family of Satara was descended from Sahu, the grandson of Sivaji, who was brought up at the Mughal court. Direct descendants died out in 1848 with Raja Shahaji, and the State then lapsed to the British Government.

The *New Palace*, built by Appa Sahib (Raja Shahaji) near the centre of the city, adjoins the Old Palace. On the façade are a number of mythological pictures, much defaced by the weather. On the N. side of the court is a vast hall—one of the largest in India. The buildings surrounding the front and main courts are occupied by the offices of the Executive and Judicial officers respectively. The roof is supported by sixty-four teak pillars, with four more in front. About 200 yds. beyond this is a pretty garden and villa belonging to the sons of Rajarām (never ruled), who was adopted by the late Rani. His surviving son is in possession of the crown jewels of the Satara family and of Jai Bhawani, the famous sword of Sivaji, and his other arms. The sword is 3 ft. 9 in. long in the blade and the handle is 8 in. long, but so small that an European can hardly get his hand into it. Like most of the famous blades in India, it is of European make, and has the stamp of Genoa. The *Wāghnakh*, or "tiger's claws," described on p. 481, has rings which pass over the first and fourth fingers, but are too small for an European hand. The shield is of rhinoceros hide, and has four stars or bosses of diamonds. The gold casket for holding Sivaji's seal is ornamented with diamonds, rubies, pearls, and emeralds, and there is an inkstand and penholder of gold similarly begemmed. The quilted coat which Sivaji is said to have worn when he murdered Afzal

Khan may also be seen. It is not lined with chain armour, as is popularly imagined, but is only a cloak of thick quilted silk, which is inconsistent with the appearance of muslin. It is lined with red silk, is richly embroidered with gold, and is very heavy. The dagger is very handsome, and is 18 in. long. The diamonds, emeralds, and rubies in the handle are very fine.

The Fort rises finely on the S. side of the town, and may now be nearly reached by a bridle-path winding up from the Cantonment. The gate of the fort is on the N. side, is of stone, and is very strongly built, with buttresses 40 ft. high. The interior of the fort is now nearly desolate. There are a bungalow and P.W.D. storehouse, with one small temple and the remains of the Raja's palace, subsequently used as a mess-house. The fort is said to have been built by a Raja of Panhala who reigned in 1192.¹ By him, too, were erected the forts of Wairatgad and Pandavgad, near Wai, and Chandan and Wandan, near Satara. Long before the time of the 'Adil Shahi dynasty at Bijapur the Fort of Satara was used as a State prison, and Sivaji, who captured it in 1673, after a siege of several months, unwittingly furnished for his descendants a prison in which they were for years confined by the Peshwas. In 1698, at the suggestion of Ramchandra Pant, Satara was made the capital of the Mahratta Government. Next year Aurangzeb, with a great army, arrived before the city and pitched his tents on the N. side. His son, Prince Azim Shah, was on the W. side, at a village since called Shahpur; Shirzi Khan invested the S., and Tarbiyat Khan occupied the E., quarter. Chains of posts between the different camps effectually secured the blockade. The fort was defended

¹ *Grant Duff*, 1, 260.

by Pryagji Prabhu, hawaldar, who had been reared in the service of Sivaji. As the Mughals advanced he withdrew into the fort, and rolled down huge stones from the rock above, which did great execution. The blockade, however, was complete—all communications were cut off, provisions were exhausted, and the besieged must have been compelled to surrender had not Parshuram Trimbak, who had thrown himself into the Fort of Parali, purchased the connivance of 'Azim Shah, and conveyed stores to the besieged. The grand attack was directed against the N.E. angle, which is one of the strongest points, the rock being 42 ft. high, with a bastion on the top of 25 ft. of masonry. Tarbiyat Khan undertook to mine this angle, and at the end of four and a half months had completed two mines. The storming party, confident of success, was formed under the brow of the hill. The Emperor moved out in grand procession to view the attack, and the garrison, and among them Pryagji, attracted by the splendour of the retinue, crowded to the rampart. The first mine burst several fissures in the rock, caused a great part of the masonry to fall inwards and crush many of the garrison to death; but the second and larger mine burst outwards with a terrible explosion, and destroyed upwards of 2000 of the besiegers. Pryagji was buried by the first explosion close to a temple to Bhavani, but was dug out alive. This was regarded by the Mahrattas as a happy omen, and, animated by it, the garrison would have made a prolonged and desperate defence, but provisions fell short, and 'Azim Shah would no longer connive at their introduction. Proposals of surrender were therefore made through him, and the honour of the capture, which he so ill-merited, was not only assigned to him, but the very

name of the place, in compliment to him, was changed by the Emperor to 'Azimgarh.

In 1705 the fort was retaken by the Mahrattas, through the artifice of a Brahman named Anaji Pant. He ingratiated himself with the Mughals under the character of a mendicant devotee, amusing them with stories and songs, and, being allowed to reside in the fort, introduced a body of Mawalis, and put every man of the garrison to the sword. Satara surrendered to the English in 1818, and Pratap Singh, eldest son of Shahu II., was installed as Raja. He held the principality twenty-one years, and, being found guilty of conspiring to massacre the Europeans in the neighbourhood and to establish the Mahratta dynasty, was sent prisoner to Benares in 1839, being succeeded by his brother, Appa Sahib (Shahaji) on whose death without issue, in 1848, the territory was annexed.

Mahuli.—This pretty place, at the confluence of the *Krishna* and *Vena* (Yena) Rivers, is about 3 m. E. of Satara, and thoroughly deserves a visit. It is considered a place of great sanctity, and the dead from Satara and the surrounding villages are brought there for cremation. Descending the river, *Kshetra Mahuli* is the name of the village on the opposite (left) bank, built in 1825, and dedicated to Radha Shankar.

On the same side of the river is the temple of *Bholeswar Mahadev*, built in 1742. The next temple is on the same bank, dedicated to Rameswar, and was built in 1700 A.D. Looking from the opposite bank, one is struck with the very fine flight of steps leading up to it from the river-bed. Close to the junction of the rivers, on the W. bank of the Krishna and the N. of the Vena, is the Temple of *Sangameswar Mahadev*, built in 1679. Below it and at the junction of the rivers is a triangular

plot of ground, with the tombs of a Gosain named *Banshapuri* and his disciples. That of the Gosain is an octagonal building of grey basalt, with open sides surmounted by a low dome. The largest of the temples is on the S. side of the Vena, at its confluence with the Krishna. It is sacred to *Visheswar Mahadev*, and was built in 1735 A.D.

160 m. Miraj junction station (R., D.B.).

A branch line, constructed by the Kolhapur State, runs W. to

29 m. Kolhapur station (population 48,122), the capital of the Native State, with a total area of about 3217 sq. m. and a revenue of 64 lakhs. It is celebrated on account of the antiquity of its temples, and is now also distinguished for its fine modern buildings. The Maharaja Sir Sahu Chhatrapati Maharaj, G.C.S.I., G.C.V.O., G.C.I.E., LL.D., etc. (salute 21 guns, personal) traces his descent from the Mahratta Chief Sivaji.

His *New Palace*, between the Residency and the city, was built at a cost of Rs.800,000, and is a very prominent object in the landscape.

The *Albert Edward Hospital* was built in commemoration of King Edward's visit to India, and contains a portrait of him.

Opposite is the *Town Hall*, situated in the *Public Gardens*. The *High School*, a handsome pile of buildings, is near the Old Palace in the centre of the town, and fronting it is the *Native General Library*. The *Resident's House* is a handsome building. Close by is *All Saints' Church*, served by the S.P.G. clergy, whose *Mission House* is 300 yds. off, $\frac{1}{2}$ m. S.W. of the Resident's House. The Ladies' Association of the S.P.G. has one school in the town and another in the camp.

A *Nakkhar Khana*, or music

gallery, forms the entrance to the *Palace Square*. To the right on entering is the *Rajwada*, or *Old Palace*, with a stone gateway in the centre and wooden pillars. On the second storey is a Darbar-room, with portraits of Aka Bai, mother of the late Chief of Kagal, and of Ahalya Bai, adoptive mother of the late Raja, Raja Ram. There is also a picture of the mausoleum at Florence erected over the spot where Raja Ram's body was burned; he died there returning from a visit to England. In the third storey is an Armoury, in which are many curious swords, one of which may have belonged to Aurangzeb, for it has in Persian the name 'Alamgir and the date 1012 A.H. There is also a Persian sword given by Sir John Malcolm to the Raja of his time.

Adjoining the Treasury, in the S. face of the square, are other *Government Offices*, and behind them the shrine of *Amba Bai*, the tutelary deity of Kolhapur. The old great bell of the temple was inscribed: "Ave Maria Gratiae Plena Dominus Tecum," and must have been obtained from the Portuguese about the year 1739.

N. of the town is a sacred spot, — the *Brahmapuri Hill* — where the Brahmans undergo cremation. About 100 yds. N. of this, close to the Panchganga River, is what is called the *Rani's Garden*, where the bodies of the ruling family are burned.

From this spot is seen a bridge over the river, with five arches, finished in 1878 at a cost of £14,000. Beyond Rani's Garden is a massive stone gateway, 20 ft. high, which leads to the *Cenotaphs* of Raja Sambaji, just opposite the door to that of Sivaji, and more to the left than that of Tara-Bai.

Kolhapur was one of the few places in the Bombay Presidency which took part in the disastrous rebellion of 1857. The mutineers, consisting of the 27th Regiment

Indian Infantry, broke open the magazines, stole arms, and carried off public treasure to the amount of Rs.45,000.

Hill Forts of Panhala and Pawan-garh.—Before leaving Kolhapur the traveller should pay a visit to Panhala, which lies 12 m. to the N.W. of the capital. There is an excellent road all the way right into the fort. The last 5 m. are up a steep ascent.

The fortress of Panhala, 2992 ft. above sea-level, is one of the most interesting in the W. of India. It stands up boldly at the top of a rocky height, and was the stronghold of a Raja in 1192 who reigned over the territory from the Mahadeo Hills, N. of Satara, to the River Hiranyakeshi. It was taken by the Kings of Bijapur, who restored it in 1549; was captured in 1659 by Sivaji, who made some of his most successful expeditions from it; and surrendered to the Mughals in 1690; and in 1844 was stormed and taken by the English. At the *Char Darwaza*, or quadruple gate, is a temple of Maruti; passing on, there is a Muhammadan tomb of granite on the left, converted into a school, and a little farther on, a temple of *Sambaji* on the same side of the road. The Sivaji Tower (1600 A.D.) is a conspicuous building of two storeys, facing E. and standing at the brink of a precipice. About $\frac{1}{4}$ m. S.W. of the tower are the stone granaries which enabled Sivaji to stand a siege of five months. They are 30 ft. high, 57 ft. broad, and 130 ft. long. At the W. side of the fort is the *Tin Darwaza*, a triple gate handsomely sculptured. To the right, at about 40 yds. distance, is the place where the English breached and stormed the fort in 1844.

Returning to Miraj junction, the line continues to

212 m. Gokak Road station (R.) (tongas available). 3 $\frac{1}{2}$ m. from here are the falls of the Ghata-prabha River, known as the **Gokak Falls**. In the rainy season they are very fine, but at other times of the year the volume of water is insignificant. The height of the falls is 176 ft., and the pool below is very deep. Near the falls, on both banks, are groups of old temples. The Gokak cotton-mills stand over the falls. The mills of the Gokak Power Company are worked by turbines supplied with water from the falls. They are on the right bank of the river, which is crossed at this point by a suspension bridge. There are the remains of many dolmens S.E. of the village of Konur, 1 m. from the falls. The Gokak Canal, an important irrigation work, starts from here.

245 m. Belgaum station (R., D.B.), a civil and military Cantonment (population 42,623), is called by the natives Shahpur Belgaum, from the neighbouring town of Shahpur, which lies to the S. It is situated in a plain about 2500 ft. above the sea, with low hills in the distance. The fort stands to the E. of the town, which contains nothing of especial interest, and to the E. of the Cantonment. It is built of stone, is oval in shape, and has earthen ramparts and a ditch. It was taken by Brigadier-General, afterwards Sir, T. Munro on the 10th of April 1818.

At 120 yds. distance is the ruined Nakkar Khana, or music gallery, and on the left is the fort *Church*, containing memorial tablets to C. J. Manson, C.S., who was murdered by a band of rebels in the night of the 29th May 1858, and to Lieutenant W. P. Shakespeare, A. P. Campbell, and Ensign W. Caldwell, who all fell in the insurrection of Kolhapur and Sawant-wadi.

Beyond the Nakkar Khana to the E. is a neat, plain mosque, and

farther S. a *Jain Temple*, built of laterite. There is a low wall at the entrance, along which are carved figures of musicians. The façade has four pillars and two pilasters, all of a very complicated character. The inscription in the old Kanara language, beautifully cut on a slab of black porphyry, which once was here and is now in the Museum of the Bombay-Asiatic Society, states that Malikarjuna, whose descent for three generations is given, built the temple.

The *second Jain Temple* is within the Commissariat Store Yard, and is very much finer than that outside. The roof is a most complicated piece of carving, rising in tiers, with eaves about 2 ft. broad, which rest on bar-like corbels from the pillars. The principal entrance faces the N.W., and has one elephant remaining at the side, much mutilated; there is a quadruple pendant in the centre. The niches are shell-shaped. There are four portals, 7 ft. sq. each, and each with four black basalt pillars. There is no image. Dr Burgess says: "The pillars of the temple are square and massive, but relieved by having all the principal facets, the triangles on the base and neck carved with floral ornamentations. The door leading from the mandapam to the temple has been carved with uncommon care. On the centre of the lintel is a Tirthankar, and above the cornice are four squat human figures. On the neat colonnettes of the jambs are five bands with human groups, in some of which the figures are little more than an inch high, yet in high relief; inside this is a band of rampant *sinhas* (lions), with a sort of high frill round their necks. Outside the colonnettes is a band of *chakras*, or sacred geese, another of *sinhas*, and then one of human figures, mostly on bended knees."

To the S.E. of this temple is the

mosque above-mentioned, called the Masjid-i-Safa. Over the entrance a Persian inscription records its being built in 1519 A.D. The mosque was built by Azad Khan, a famous Bijapur captain, Governor of Belgaum during the first half of the 16th century.

St Mary's Church stands in the Cantonment N.W. of the town. It was consecrated in 1869. There is a handsome Memorial Cross in the compound to twenty-three sergeants of H.M.'s 64th, who died during the Persian and Indian campaigns, 1856-8. Shooting passes can be had for Rs.25 from the Conservator of Forests, S.D., Belgaum, for the jungles in the S. of Belgaum District and in the neighbouring District of N. Kanara.

At Sutgati, 14 m. from Belgaum, there are two Indian fig-trees of very great size. The first is near the D.B. The stem forms a wall of timber extending 40 ft., and rises to a great height; the branches spread out 100 ft. round the trunk. The other tree is about 1 m. from the bungalow, and though not remarkable for height, covers a larger surface of ground.

278 m. Londa junction station (R.). Line to Hubli, and thence E. to Bezwada, at the head of the delta of the Krishna River, and S.E. to Bangalore (see p. 505).

293 m. Castle Rock station (R.). Here, at the frontier of the Portuguese territory of Goa, the S. Mahratta line is joined by the West of India Portuguese Railway, which in 51 m. runs down the Braganza Ghat to Mormugão, the seaport of Goa. In the first 10 m. the line passes through a dozen tunnels, ranging from 150 ft. to 838 ft. in length, which had to be cut almost entirely out of the solid rock. Apart from its commercial importance, the line

possesses much interest for lovers of the picturesque, as it runs through magnificent scenery.

308 m. Dudh Sagar station, or the "sea of milk," where there is a very fine waterfall.

362 m. Vasco da Gama.

364 m. The terminus of the railway is on the quay at the Port of Mormugão, which, as well as the line, is the property of the West of India Portuguese Railway Company. Arrangements have been made that the trade there shall be as free as in British India.

The B.I.S.N. Company's and the Shepherd Company's vessels run to and from Bombay in twenty-six hours.

In approaching Goa from Bombay by sea the steamer enters a spacious harbour formed by two estuaries, with the Ilha de Goa in between them, and embraced by two rocky promontories. At the extremity of the S. arm Salsete is the landing-place and quay of Mormugão, where a steamer of 4000 tons can be berthed. Here, at the foot of a sandy cliff, is the *Terminus* of the railway. To reach New and Old Goa from it a small steamer crosses the estuary of Mormugão, rounds the *Cabo*, the W. point of the island, enters the estuary of Aguada, ascends the Mandovi, one of the two rivers falling into it, and passes, near its mouth, the fine *Fortress* and *Church of Reis Magos*, on the S. promontory of Bardes. On the right is the island of Goa, and upon it, at about 4 m. from Mormugão, stands

New Goa, * otherwise *Panjim*, a town of no pretence. It contains 9588 inhabitants, and more than half the Indian population are Christian descendants of Hindus converted by the Jesuits and other religious orders.

A row of handsome buildings lines the quay, including the *Old Fort*, now the residence of the Governor-General, who removed hither from Old Goa about 1760, and in 1843 made this the seat of government and capital of the Portuguese territory in India. Here also is the *Palace of the Archbishop*, who is Primate of the Roman Catholic Church in India. It contains some life-sized portraits of the Archbishops.

At a short distance to the W. of the residence of the Governor-General are the *Barracks*, which hold the standing army of 740 men. In front of them is a statue of Afonso d'Albuquerque, the founder of Old Goa, brought from there.

The "*Goa Boys*," so well known in Bombay and in other parts of India as servants, come from Goa.

A good road (conveyances available) leads from New to Old Goa about 5 m. higher up the valley, at first crossing a causeway thrown over the swamp to *Ribandar* village. From here cocoanut plantations and dwelling-houses line the way, which commands a fine view N. across the river to the hilly, wooded country beyond, and includes a conspicuous round hill, crowned by a Church and conventual buildings, upon the river-island of Divar. *En route* are passed the later Archbishopal Palace and the Fountain of Banguenim, which used to furnish water to Old Goa.

Old Goa (Goa Velha, "Senhora de codo o Oriente," Camoens, 2, 51) owes its origin to Afonso d'Albuquerque, who at the head of twenty ships and 1200 troops carried by storm a small coast town of the Bijapur State in 1510 A.D. On this site he founded the Christian city. It rose rapidly into prosperity and importance, and by the middle of the 16th century became the wealthiest city in all India (Goa

dourada), the capital and seat of Government of the then vast Portuguese territory, with a population of 200,000—ilha illustrissima de Goa, Camoens. Moreover, it was the first Christian colony in the Indies and the scene of the labours of St Francis Xavier in 1542-52. But decay followed rapidly, first owing to the attacks of the Dutch, whose fleets blockaded its harbour, and next because of its site proving pestilential, and it became deserted by its inhabitants.¹ It is now literally a city of ruins, with a population of 155 inhabitants, and is so hidden from view by the foliage of the jungle which has occupied it that the stranger approaches it unawares, and drives into the midst unconscious that he is traversing streets of ruined, empty dwellings, occupied by cocoanut and other tall trees instead of by human beings.

In the midst of all this ruin Goa remains a city of magnificent churches, four or five ranking as first class and in perfect preservation, though the style of architecture betrays the degraded taste of the Jesuits.

The road from Panjim leads past the Arsenal on the left and the hill of the Church of the Rosary on the right into a large central square, named the Pelourinho from the stocks in it, and surrounded by churches and convents. The most important of these and the holiest, because it contains the body of St Francis Xavier, is the Bom (the Good) Jesus, on the right (S.) side, erected in 1594. Its handsome façade runs on into that of another great building with lofty halls and lengthy corridors, all empty, the *Convent of the Jesuits*, which,

though not finished until 1590, thirty-eight years after the death of St Francis, had the merit of rearing and sending forth over the world an admirable and devoted band of missionaries, the children of that saintly man who worked so hard for the salvation of the heathen in India, China, Japan, Paraguay, and N. America. The order was suppressed here in 1759, the other monastic orders in 1835, when their property was confiscated to the State. The endowments of the churches, however, have not been forfeited, and the Archbishop and the secular clergy of Goa still receive allowances from Government.

The Church of Bom Jesus may be entered by a side door from the Jesuits' College, passing the Sacristy, a spacious hall, with wardrobes filled with rich priestly robes. Near it hangs a portrait of St Francis Xavier at the age of 44—a dark face of sweet expression.

The Tomb and Shrine of St Francis Xavier (1696) occupy a side chapel, richly adorned; the walls are lined with pictures illustrating some of the acts of his life. The monument is a stately structure, consisting of three tiers of sarcophagi of costly jasper and marble, and was the gift of a Grand Duke of Tuscany. The upper tier is ornamented with panels curiously wrought in coloured marbles so as to represent scenes in the life of the saint; the whole is surmounted by the silver coffin containing the body, and adorned with reliefs also in silver, and with figures of angels in the same metal supporting a cross. The coffin, weighing 600 marks of silver, is unlocked by three keys, in the keeping of the Viceroy, the Archbishop, and another, and has been frequently opened, disclosing to public view the body, which was long in wonderful preservation, but has now shrunk to a mummy. The body

¹ Goa in its palmy state is admirably described by Captain Marryat in his *Phantom Ship*; in its present state by Graham Sandberg, *Murray's Magazine*, November 1890. J. N. Fonseca's *Sketch of the City of Goa* is full of interesting information.

of the saint was translated here from the Sanchão's island, where it was originally buried.

In the body of the church is a statue of the saint of solid silver, the gift of Donna Maria, wife of Pedro II. and Queen of Portugal.

250 yds. distant, on the opposite side (N.) of the square, stands the Cathedral of St Catherine,¹ built in 1562-1623, the church next in importance to the Bom Jesus, and known as the Se Primaçal. It is 250 ft. long, 180 ft. wide, with façade 116 ft. high, and has a whitewashed inside, with a high altar at the W. end. It alone of all the churches retains a staff of priests—twenty-eight canons—who perform the service throughout the year. On looking from the terraced roof of the cathedral one cannot but think of the solemn and terrible sights that have been seen in the square below, when the great bell of this church tolled to announce the celebration of an *auto-da-fé*.

N.W. of the cathedral is the *Archbishop's Palace*, a magnificent residence, still occupied occasionally.

W. of the cathedral is the once gorgeous *Church of San Francisco d'Assisi*, the oldest here, having been adapted from a mosque. It was, however, rebuilt 1521, except the porch, which is original, and is in fair repair.

In front of the cathedral stood the *Palace of the Inquisition*, with its dungeons and prisons, established in 1560 and suppressed in 1814, now an overgrown heap of ruins an acre in extent.

S. of the Inquisition, at the N.E. corner of the square, were the buildings of the *Misericórdia*, enclosing the Church of Nossa Senhora de Serra, built by Albuquerque in fulfilment of a vow at sea, and in which he was originally buried. From these the Rua

Direita led to the river front and the Viceroy's Palace. The Arch of the Viceroys, which still bears the deer crest of Vasco da Gama, stands over the principal landing-place known as the Ribeira dos Vicerays, which extended W. to the Quai of the Galleys (Ribeira dos Galés) and E. to the Customs House (Alfandanga) and the Great Bazar. The Palace is a ruin. E. of the Palace and the bazar is the *Church of St Cajetan*, perhaps the best preserved, built 1665, and surmounted by a dome and by two low towers; the façade is of red laterite, whitewashed. The convent is now the Museum; where some curiosities of the olden time are preserved: it contains some life-sized portraits of the Viceroys and Governors, and there the Governor-General stops on his periodical visits to old Goa. Beyond lay the convent of the Dominicans, with that of the Carmelites on a hill, and the famous missionary *College of Saint Paul*, or Santa Fé, which is about $\frac{1}{2}$ m. E. from the Bom Jesus. The *autos-da-fé* used to take place in the Campo San Lazaro, near this. At the W. end of the town, near the Arsenal, was the famous *Royal Hospital*, the first established by Europeans in the East.

The following facts concerning the Portuguese possessions in India will no doubt prove of interest. The total population is under 550,000, of which the Goa territory contains 486,752. This territory has a coast-line of about 65 m., and includes the small island of Anjediva, near Carwar. It is divided into two tracts, known as the Old and New Conquests (Velhas e Novas Conquistas), and these are subdivided into three and seven District charges, at the head of each of which is an Administrator and a Municipal Council. Daman (p. 162) is divided into two such charges, while Diu, an island off the S.E. coast of Kathiawar, constitutes one only; these

¹ Goa was recaptured on St Catherine's Day.

two are under separate Governors subordinate to the Governor-General, who is also Governor of Goa, as the Governor-General of India was once Governor of Bengal. There is a High Court (Tribunal de Relação) of second instance at Goa, consisting of five judges, which has jurisdiction over Macao and Timor as well as over the Portuguese possessions in India, and a subordinate judge in each District. The European military force consists of 163 men; the Indian force amounts to 2276. There are engineering and health Departments. Panjim has a Lyceum, a normal school, and a medical school, and some 105 primary schools exist in the Goa country. The annual revenue of the Portuguese possessions in India is about 1,061,734 *escudos* (4 *escudos* 50 cents, at par= $\frac{1}{2}$), of which customs yield about 307,400 *escudos* (35 cents of an *escudo*=1 rupee); this source of income is pledged for payment of interest on the railway.

The following details regarding the conqueror and founder of Goa will be found interesting: Affonso d'Albuquerque was born in 1453, and was therefore fifty years old when he visited Cochin and Quilon on his first journey to India in 1503. In 1506 he occupied Socotra on behalf of the Portuguese Crown, and in November 1509 he became Governor of the Eastern possessions of that Crown. Panjim was taken and Goa surrendered early in the following year, and the latter was stormed and recovered from the Bijapur troops on 25th November following. During the next two years the Governor was occupied with the affairs of Malacca; in 1513 he attempted to capture Aden, but failed; and in 1514 he caused a fort to be erected at Calicut after the Zamorin had been poisoned. In February 1515 he proceeded to Ormuz and obtained possession of the fort there, and died on his

way back from that place to Goa on 18th December 1515. His body was finally transferred to Lisbon, and now rests there in the Church of Nossa Senhora da Graca.

ROUTE 28.

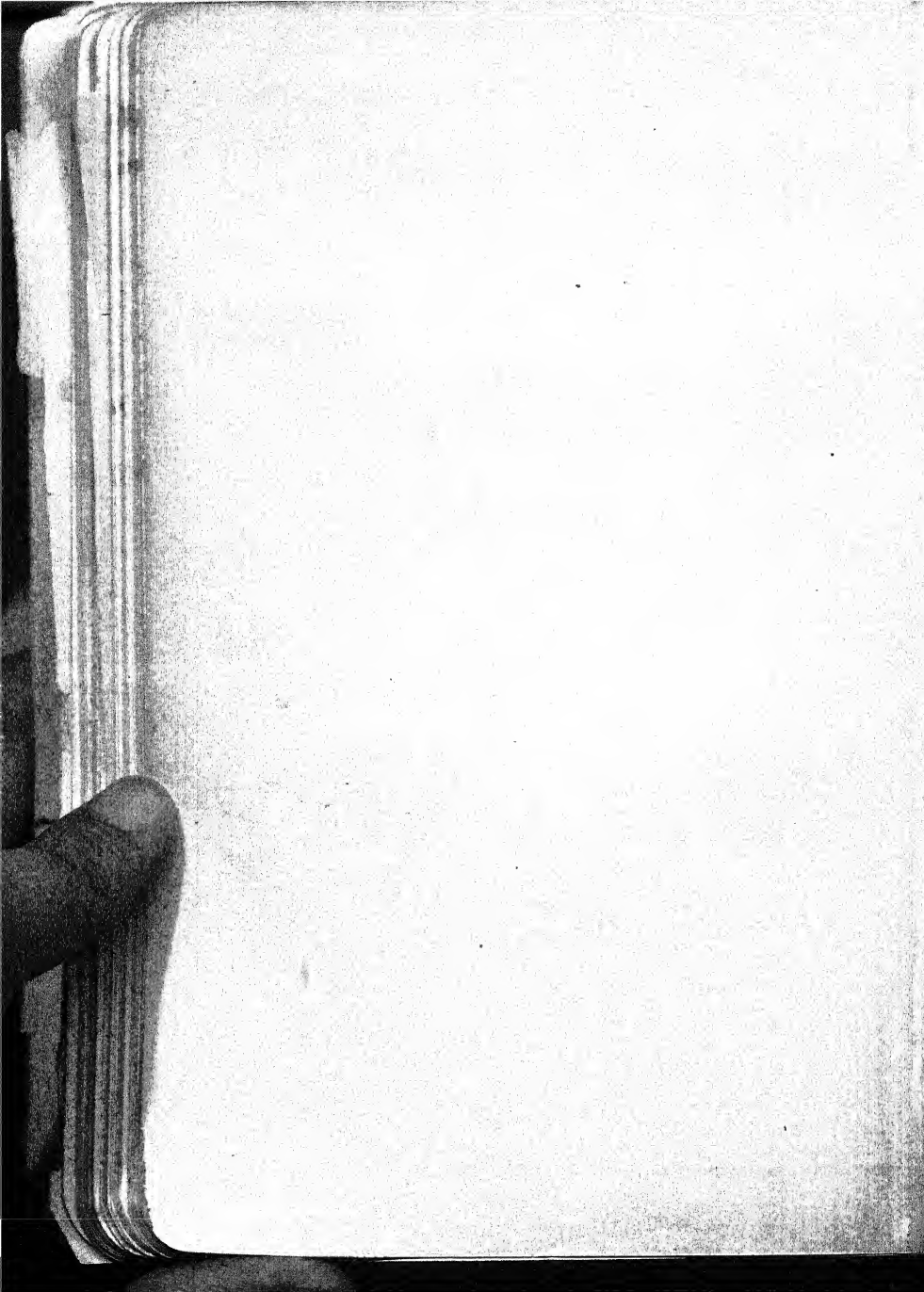
HOTGI JUNCTION TO BIJAPUR,
Gadag, Hubli, Dharwar, and
Londa, with Excursion to Caves
and Temples of Badami.

Hotgi junction station (R.) is 9 m. E. of Sholapur, on the line from Bombay to Madras (see Route 26). Between the first and second stations from Hotgi the Bhima River is crossed, flowing in a deep rocky bed. From Minchnal, the station before Bijapur, the domes and minarets of the city are plainly seen to the S.

58 m. **BIJAPUR**¹ station * (originally *Vijayapura*, "City of Victory") (R., D.B.; population 27,615). The railway station is E. of the city and close to the Gol Gumbaz, the great tomb of Muhammad 'Adil Shah.

Yusaf Khan, the first King of Bijapur on the decay of the Bahmani dynasty, was a son of Amurath II., of Anatolia, and a Turk of pure blood, whose mother was forced to fly with him from Constantinople while he was still an infant. After a varied career he was purchased for the body-

¹ An admirable guide by Mr H. Cousens, C.I.E., giving details of all the buildings and a valuable historical sketch of the 'Adil Shahi dynasty, can be bought at the principal booksellers in Bombay and Poona.



guard at Bidar (p. 505), and raised himself to such pre-eminence that in 1489 he was enabled to proclaim his independence and establish himself as the founder of the 'Adil Shahi Kings of Bijapur. The following is the order of their succession :—

	'Adil Shah	A.D.
Yusaf Khan,		1489
Ismail	"	1510
Mallu	"	1534
Ibrahim I.	"	1534
'Ali I.	"	1557
Ibrahim II.	"	1580
Muhammad	"	1627
'Ali II.	"	1656
Sikandar	"	1672 to 1686

in which year the city was taken by Aurangzeb. The great architectural outburst of the place followed on the capture and spoil of Vijayanagar (p. 516) after the Battle of Talikota in 1565. The kingdom extended to the West Sea, and Goa was a portion of it.

The Kaladgi District was renamed Bijapur in 1883, when Government decided to re-occupy the old capital as administrative headquarters of the District. Great difficulty was experienced in clearing ground for roads and houses from the large areas of prickly pear that had to be removed, but this was gradually done, and the station is now well planted with trees. Those who object to the utilitarian uses to which a number of the buildings at Bijapur have been put, must also remember that by its action Government has saved these and the other buildings from the complete destruction which was threatening them.

Torweh, or Nauraspur, about 1610 A.D. was a great suburb—a rival city, to the W. of Bijapur; but when Aurangzeb took the latter the former was "quite depopulated, its ruined Palaces only remaining, with a thick wall surrounding it, whose stately gateways were falling to decay."

This suburb, then, whose walls extended 3 m. from the W. gate of the fort, and probably other suburbs which have now utterly perished, must have been included in the 30 m. circuit which tradition ascribes to Bijapur. What is called the city now is the fort, of which Grant Duff says it was 6 m. in circumference. Within the circuit of the fort is the citadel, with walls extending 1650 ft. from N. to S. and 1900 ft. from W. to E. An examination of the buildings will give proof of the former riches and magnificence of this old capital. Two days will not be too much to devote to the principal buildings alone.

The Gates of the fort or city are :—

The Fateh Gate (1),¹ in the centre of the S. wall of the city, by which Aurangzeb is said to have entered.

The Shahapur Gate (2), on the N.W. The gate itself is furnished with long iron spikes on the outside, to protect it from being battered in by the elephants of an enemy. This was a common device throughout India. S. of it, on the W. of the city, is the

Zohrapur = Jorapur Gate (3); and 600 ft. to the S. of that is the

Makka Gate (4), with representations on either side of lions trampling on an elephant. This gate is closed and converted into a school. A less imposing one, a few hundred yds. farther N., serves its purpose. Almost exactly opposite to it, on the E. side of the city, is the

'Alipur Gate (5), or High Gate, wrongly called in maps and elsewhere the Allahpur Gate. N. of it is the

Padshahpur Gate (6), near the railway station.

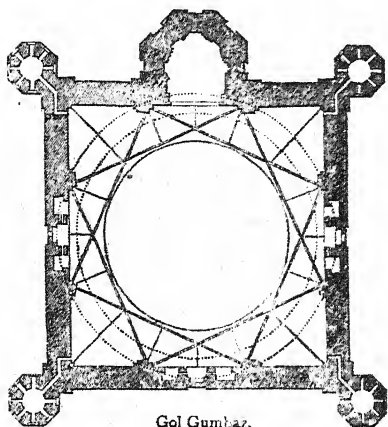
In the centre of the N. wall is the Bahmani Gate (7).

¹ The numbers refer to the corresponding numbers on the plan of Bijapur.

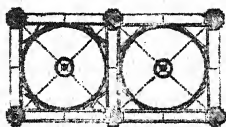
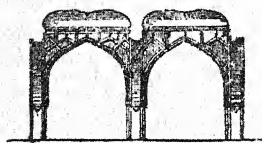
On the E. side of the city, close to the railway station, is the *Mausoleum of Muhammad 'Adil Shah*, seventh King, a magnificent structure, generally called the *Gol Gumbaz*, or "Round Dome" (8). Mr Fergusson, in his *Hist. of Ind. Arch.* (2, 273), says of this building: "The tomb of Muhammad was in design as complete a contrast to that" of Ibrahim II. (see p. 497), "as can well be imagined, and is as remarkable for simple grandeur and constructive boldness as that of Ibrahim was for excessive richness and contempt of constructive properties. It is constructed on the same principle as that employed in the design of the dome of the great mosque, but on so much larger a scale as to convert into a wonder of constructive skill what, in that instance, was only an elegant architectural design." It is built on a platform 600 ft. square and 2 ft. high. In front is a great gateway, 94 ft. by 88 ft., with a *Nakkar Khana* (music gallery), now a museum of Bijapur antiquities. The tomb is a square building, with sides measuring 196 ft. (exterior), and at each corner is a tower, seven storeys high. In the centre is the great dome, 124 ft. in diameter, while that of St Peter's is 139 ft., and that of St Paul's 108 ft. Over the entrance are three inscriptions—"Sultan Muhammad, inhabitant of Paradise"; "Muhammad, whose end was commendable"; "Muhammad became a particle of heaven (lit. House of Salvation), 1067." The date, thus three times repeated, is 1659 A.D. The surface of the building for the most part is covered with plaster. Each façade has a wide, lofty arch in its centre, pierced with small windows and a blind one on either side, and above it is a cornice of grey basalt and a row of small arches supporting a second line of plain work, surmounted by a balustrade 6 ft. high. The corner

towers are entered from winding staircases in the thickness of the walls of the main building, and terminate in cupolas. Each storey has seven small arched windows opening into the court below. From the eighth storey there is an entrance to a broad gallery inside the dome, which is so wide that a carriage might pass round it. Here there is a most remarkable echo; a soft whisper at one point of the gallery can be heard most distinctly at the opposite point, and, as Mr Cousens says, "one pair of feet is enough to awaken the echoes of the tread of a regiment." The great hall, 135 ft. square, over which the dome is raised, is the largest domed space in the world. The internal area of the tomb is 18,225 sq. ft., while that of the Pantheon at Rome is only 15,833. "At the height of 57 ft. from the floor-line," says Mr Fergusson (*Hist. of Ind. Arch.*, 2, 274), "the hall begins to contract by a series of pendentives as ingenious as they are beautiful, to a circular opening 97 ft. in diameter. On the platform of these pendentives, at a height of 109 ft. 6 in., the dome is erected, 124 ft. 5 in. in diameter, thus leaving a gallery more than 12 ft. wide all round the interior. Internally the dome is 178 ft. above the floor, and externally 198 ft. from the outside platform; its thickness at the springing is about 10 ft., and at the crown 9 ft."¹ From the gallery outside there is a fine view over Bijapur. On the E. is

1 "The most ingenious and novel part of the construction is the mode in which its lateral and outward thrust is counteracted. This was accomplished by forming the pendentives so that they not only cut off the angles, but that, as shown in the plan, their arches intersect one another and form a very considerable mass of masonry perfectly stable in itself; and, by its weight acting inwards, counteracting any thrust that can possibly be brought to bear upon it by the pressure of the dome."—Fergusson, *Ind. Arch.*, 2, 274.



Gol Gumbaz.



Section of Domes, Jami Masjid.

'Alipur; on the W. are seen the Ibrahim Rauza, the Upari Burj, the Sherza Burj, or Lion Bastion, and to the N.W. the unfinished tomb of 'Ali 'Adil Shah II., and about 1 m. towards the N. the ruins of the villages of the masons and painters employed on the Gol Gumbaz; and on the S.W. is the dome of the Jami Masjid. There is a small annexe to the mausoleum on the N., lately roofed over, built by Sultan Muhammad as a tomb, it is supposed, for his mother, Zohra Sahiba, from whom one of the suburbs was called Zohrapur, now called Jorapur. It was never finished or occupied.

Below the dome is the cenotaph of Sultan Muhammad in the centre. On the E. side are the graves of his youngest wife and of the son of 'Ali 'Adil Shah II.; on the W. are those of his favourite Hindu mistress and dancing-girl Rambha, his daughter, and his eldest wife, mentioned by Bernier.

On the edge of the platform W. is the mosque attached to the mausoleum, a building of no mean size and of considerable beauty of design, but quite eclipsed by the size of the Gol Gumbaz.

The museum of Bijapur antiquities in the Nakkar Khana, referred to above, should be visited, though the collections are still in an incomplete condition. They include some of the famous Bijapur carpets.

The Jami Masjid (9), nearly $\frac{1}{2}$ m. S.W. of the Gol Gumbaz, is entered by a gateway on the E. side. The surrounding wall was never completed on the E. The arcades on the N. and S. sides are 31 ft. broad. In the centre of the quadrangle is the hauz or tank for ablutions, now dry. Mr Fergusson says: "Even as it is, it is one of the finest mosques in India."

It was commenced by 'Ali 'Adil Shah I. (1557-79), and, though continued by his successors, was never completely finished. The

mosque proper has a façade of nine bays, and is five bays in depth. Each of the squares into which it is divided has a domed roof, beautiful, but so flat as to be concealed externally. The centre, a space 70 ft. square, corresponding to twelve of these squares, is roofed over by the great dome, which is 57 ft. in diameter. It is supported on pendentives in the same manner as the Gol Gumbaz. The pavement below the dome is of chunam, divided by black lines into numerous squares called *musallaks*, or compartments for persons to pray on, imitating the *musallah*, or prayer-carpet, which the faithful carry with them to the mosques. These were made by order of Aurangzeb when he carried away the velvet carpets, the large golden chain, and other valuables belonging to the mosque.

The mihrab, which marks the place on the W. to which the people turn in prayer, is gilded and ornamented with much Arabic writing. There is also a Persian quatrain. The date is 1636 A.D.

The Mihtari Mahal (10) is the name given to the entrance gateway to the Mihtari Mosque, a building of minor importance. It stands between the Jami Masjid and the citadel, on the S. of the road. It is a small but elegant structure, three storeys high, with minarets at the corners and ornamental carving in soft stone about its balconied and projecting windows. Mr Fergusson says (2, 278) of this structure: "One of the most remarkable edifices is a little gateway, known as the Mihtari Mahal. It is in a mixed Hindu and Muhammadan style, every part and every detail covered with ornament, but always equally appropriate and elegant. Of its class it is perhaps the best example in the country,

though this class may not be the highest."

The Palace of the Asár-i-Sharíf (11), "illustrious relics," which are hairs of the Prophet's beard, is a large heavy-looking building of brick and lime, standing outside the moat of the inner citadel and the centre of its E. rampart. The E. side is entirely open from the ground to the ceiling, which is supported by four massive teak pillars, 60 ft. high. This forms a deep portico 36 ft. broad, and looks upon a tank 250 ft. square. The ceiling of the veranda or portico is panelled in wood and has been very handsomely painted. The whole of the W. side is occupied by rooms in two storeys. A flight of stairs ascends to a hall 81 ft. long and 27 ft. broad, where some of the fine old carpets and brocades of the Palace are shown under glass. Most of the former have now been transferred to the Museum. Opening right from this hall is an upper veranda or ante-chamber which looks down into the portico (already described) below. Its ceilings and walls have been gilded; the doors are inlaid with ivory, and in the palmy days of Bijapur the effect must have been very striking. The Asár-i-Sharíf formerly communicated on its W. side with the citadel by means of a bridge, of which nothing now remains but the piers. Originally built as a court of justice by Muhammad Shah about 1646, it succeeded to the honour of holding the precious relics of the Prophet after a similar building within the citadel had been burned down.

The Arkilla or Citadel.—The only citadel gateway that remains is at the extreme S., facing E.; here the walls are full of ancient pillars and sculptured stones, taken from Jain temples which probably stood on this spot when the Muhammadans stormed

the citadel. Other stones were utilised in the construction of the two "old mosques" within the citadel.

The Old Mosque (12), just N.W. of the gate, is a converted Jain temple. The central mandapam, or hall, two storeys high, serves as the porch. The inner doorway, with its perforated screens, is Muhammadan work. The mosque proper is made up of Hindu or Jain pillars of various patterns and heights. At the N. side, near the centre row, is a wonderfully handsome and elaborately-carved black pillar, and to the N.E. of it an ancient Kanarese inscription. On several of the pillars around are inscriptions, some in Sanskrit and some in Kanarese. One bears the date 1320 A.D.

The Anand Mahal (13), or "Palace of Delight," where the ladies of the seraglio lived, is in the centre of the citadel. It was built by Ibrahim II. in 1589, and intended partly for his own use, but the façade was never finished. It contains a very fine hall, and is now the Assistant-Collector's residence. The Station Club is also located here.

The Gagan Mahal (14), or (sky) "Heavenly Palace," supposed to have been built by 'Alí 'Adil Shah I., is on the W. of the citadel close to the moat, and faces N. It has three magnificent arches. The span of the central one is 61 ft., and that of each of the side arches 18 ft. The height of all three is the same—about 50 ft. It was used as a darbar hall, and on the roof was a gallery, from which the ladies could see what occurred on the open space in front. It is said that here the Emperor Aurangzeb received the submission of the King and the nobles on the fall of Bijapur.

An old gateway of the Palace to the S.E. of the Gagan Mahal has been converted into the Station Church (15). In plan it is a square; the roof is supported by four pillars, and it is decorated with exquisite relief patterns in flat plaster work. The beautifully wrought-iron screen was found in the Chini Mahal.

About 150 yds. to the N.E. of the Gagan Mahal is another old mosque (16), built with the stones of a Jain temple. It has ten rows of pillars seven deep.

E. of this is the *Adalat Mahal*, now the Collector's residence, with a small mosque on the N. side, and an extremely pretty pavilion or pleasure house E. of it and in front of the Civil Surgeon's residence, on a corner of the citadel wall. A little to the N. of this is *Yakut Dabuli's Tomb and Mosque*. The tomb is square, with stone lattice-work screens. It was Yakut Dabuli who decorated the mihrab of the Jami Masjid.

On the extreme W. of the citadel is the *Sat-Manzili* (17), or "Seven Storeys," Rambha's pleasure Palace, from the top of which the whole city could be overlooked. Of this only five storeys now remain. A peculiarity of the building is the number of water-pipes and cisterns round about it. It formed the N.E. corner of a vast structure wrongly called the *Granary* (18), at the S. end of which is a large building, which was the public Palace of the Kings, where their public audiences were held.

This Palace is called the *Chini Mahal* (19), from the quantity of broken china found there, and possesses a fine hall 128 ft. long. It is now used as the Collector's office and the Judge's Courts.

In front of the *Sat-Manzili* (17), in the centre of the road, stands a

beautifully ornamented little pavilion known as *Jal Mandir*, (20), signifying that jets of water played in it. From this the moat of the citadel is crossed by a causeway 140 ft. long, but the average breadth of the moat may be taken as 150 ft. Opposite the end of the causeway on the outside is the *Malika Jahan or Jhanjiri Mosque*, one of the most effective buildings in all Bijapur.

N.E. of the gateway and the Old Mosque is the *Makka Masjid* (21), a miniature mosque of beautiful proportions and great simplicity of design. The massive minarets at the corners of the high walls which surround it in all probability belonged to an earlier building. The façade of the mosque proper has five bays of arches about 8 ft. high, is two bays deep, and is surmounted by a dome.

Immediately to the W. is a huge walled space, the *Hâthikhana*, as it is thought to have been an elephant stable, and adjoining it S. is a tower which was probably used for the storage of grain. Close by on the E. wall of the citadel is the picturesquely situated high-standing *Chinch Diddi Mosque*.

The unfinished *Tomb of 'Ali 'Adil Shah II.* (22) lies outside the citadel to the N. It is a noble ruin, a square with seven large Gothic-looking arches on each side, constructed on a terrace 15 ft. high and 215 ft. square. Had not the death of the Sultan put a stop to its progress and prevented its completion in conformity with the original design, it would have surpassed every other building at Bijapur both in magnificence and size. The cenotaph is in the centre enclosure, which is 78 ft. square, and if completed would have been crowned by a dome.

Close to this tomb on the S.W. is the pretty Bukhara Masjid, for a time used as the Post Office (23), and just N. of this is the beautiful mosque and tomb of Sandal Khan. To the W. again, half-way to the Haidar Burj, is the *Sikandar Rauza*, the plain grave of the last ruler of Bijapur, who was compelled to surrender his kingdom to the Mughal Emperor.

To the W. of the city, and near the Makka Gate, are two domed tombs close together and very much alike, known as the Jor Gumbaz and to Europeans as the "Two Sisters" (24). The octagonal one contains the remains of *Khan Muhammad*, assassinated at the instigation of Sultan Muhammad for his treacherous dealings with Aurangzeb, and of his son *Khawas Khan*, Wazir to Sikandar. The dome is nearly complete, and springs from a band of lozenge-shaped leaves. The space within forms a beautiful room. The square building is the mausoleum of *Abdul Razzak*, the religious tutor of Khawas Khan. It is a large building, now much decayed. Near it S. is the *Tomb*, with its unfinished brick dome, of *Kishwar Khan*, whose father, Asad Khan, is repeatedly mentioned by the Portuguese. He founded the fort of Dharur in the time of 'Ali 'Adil Shah I., and was taken and put to death by one of the Nizam Shahi Kings.

The old execution tree, an *Adamsontia* or "*Gorak Imli*," is passed on the way from the citadel to the "Two Sisters," in the compound of the Judge's new bungalow.

The *Andu Masjid* (25), 1608, stands on the E. side of the road, which runs S. from the citadel. It is a two-storeyed building, the lower part forming a hall, and the upper part the mosque proper and its small court. The façade has three bays; it is surmounted by

a fluted dome and four small minarets, and the masonry and workmanship are finer than those of any other building in Bijapur. A road running W. from here and S. of the "Two Sisters" leads to the tomb of the Begam Sahiba, a wife of the Emperor Aurangzeb, who died of plague, and to the Nau Bagh. Another road to the W. from opposite the house of the District Superintendent of Police, 300 yds. S. of the Andu Mosque, leads to the Jami Masjid of Ibrahim I., and, according to tradition, the tomb of 'Ali I. The latter is a simple building with a corridor all round it. In front of it, on a high platform, is a fine tombstone of dark green stone, both of which are richly and effectively carved.

700 ft. N. of the Jami Masjid is *Khawas Khan's Mahal*. *Nawab Mustafa Khan's Mosque*, 400 yds. N. of this, and 500 yds. E. of the citadel, is a lofty building with a façade of three arches and a central dome supported on pendentives. Behind the mosque W. are the ruins of the Khan's Palace. Mustafa Khan Ardistani was a distinguished nobleman at the court of 'Ali 'Adil Shah I., and was murdered in 1581 A.D. by Kishwar Khan, who usurped the regency in the time of Ibrahim 'Adil Shah II.

Outside the W. wall of the city, 400 yds. from the Makka Gate, is

The Ibrahim Rauza (also called Roza) (26), a group of buildings which includes the tombs of Ibrahim II. 'Adil Shah, his Queen Taj Sultana, and four other members of his family. It is said to have been erected by a Persian architect. It is enclosed by a strong wall with a lofty gateway. The courtyard within was once a garden; in the centre of it is raised an oblong platform, upon which stands the tomb, and to the W. of it a mosque, with a fountain and reservoir between them. The

five arches which form the E. façade of the *Mosque* are very graceful; above them, under the rich cornice, hang heavy chains cut out of stone. On each of the four sides of the *Tomb* is a colonnade of seven arches, forming a veranda 15 ft. broad round the whole edifice. The pavement of this colonnade is slightly elevated, and its ceiling is exquisitely carved with verses of the Koran, enclosed in compartments and interspersed with wreaths of flowers. The letters were originally gilded, and the ground is still a most brilliant azure. In some places the gilding also still remains. The border of every compartment is different from that of the one adjoining. The windows are formed of lattice-work of Arabic sentences, cut out of stone slabs, the space between each letter admitting the light. This work is admirably executed, and there is nothing to surpass it in all India. Above the double arcade outside the building is a magnificent cornice with a minaret four storeys high at each corner and eight smaller ones between them. From an inner cornice, with four minarets on each side, rises the dome. The plan of the building resembles that of the tombs at Golconda. The principal apartment in the tomb is 40 ft. square, with a stone-slab roof, perfectly flat in the centre, and supported only by a cove projecting 10 ft. from the walls on every side. "How the roof is supported is a mystery which can only be understood by those who are familiar with the use the Indians make of masses of concrete, and with exceedingly good mortar, which seems capable of infinite applications. Above this apartment is another in the dome as ornamental as the one below it, though its only object is to obtain externally the height required for architectural effect, and access to its interior can only be obtained by a dark, narrow stair-

case in the thickness of the wall." Over the N. door is an inscription in Persian extolling the building in very exaggerated terms. The last line is a chronogram, which gives the date 1036 A.H.=1626 A.D. Over the S. door is another inscription in praise of the monarch, with the date 1633. Over the same door is inscribed—

[Translation.]

The work of beautifying this Mausoleum was completed by Malik Sandal.² Taj-i-Sultan issued orders for the construction of this Roza, At the beauty of which Paradise stood amazed. He expended over 1½ lakhs of hunns, And 900 more.

The hun being Rs. 3½, the total expense was about £50,000. When Aurangzeb besieged Bijapur in 1686 he took up his quarters in the Ibrahim Rauza, which received some damage from the Bijapur guns. These injuries were partially repaired by the Raja of Satara, and the restoration was completed by the English.

Guns and Bastions.—The Burj-i-Sherza, or "Lion Bastion" (27), so called from being ornamented by two lions' heads in stone, is 300 yds. N. of the Zohrapur Gate. In the W. wall on the right-hand side on ascending the steps of the bastion is an inscription stating that it was built in five months, and giving the date 1671. On the top of this bastion is a huge gun, called the *Malik-i-Maidan*, "Lord of the Battle Plain." At the sides of the muzzle the representation of the mouth of a monster swallowing an elephant is wrought in

¹ From Fergusson's *Hist. of Ind. Arch.*, 2, 273. The author also says that Ibrahim commenced his tomb "on so small a plan, 116 ft. sq., that it was only by ornament that he could render it worthy of himself, his favourite wife, and other members of his family."

² The tomb of this personage is W. of the incomplete tomb of 'Ali 'Adil Shah II. See above.

relief. It was cast at Ahmadnagar in a bell metal which takes a very high polish. It is 14 ft. long, the circumference is about 13 ft. 6 in., and the diameter of the bore is 2 ft. 4 in. Just above the touch-hole is the following inscription—

The work of Muhammad Bin Husain Rumi.

At the muzzle is the following—

The servant of the family of the Prophet of God, Abu'l Ghazi Nisam Shah, 956 A.H. (= 1551 A.D.).

At the muzzle is also—

In the 30th year of the exalted reign, 1097 A.H., Shah 'Alamgir, conqueror of infidels, King, Defender of the Faith, Conquered Bijapur, and for the date of his triumph, He fulfilled what justice required, and annexed the territory of the Shahs, Success showed itself, and he took the Malik-i-Maidan.

About 150 yds. E. of the Sherza Burj, and near the heavy Idgah, is a strange building, called the *Upari Burj*, or "Upper Bastion," also called the *Haidar Burj* (28), after a General of 'Ali I. and Ibrahim II. It is a tower 61 ft. high, oval in plan, with an outside staircase. On the way up will be noticed a Persian inscription recording the building of the tower in 1583.

On the top are two guns made of longitudinal bars held together with iron bands. The larger, called the *Lamcharri*, "far flier," is 30 ft. 8 in. long, and has a diameter of 2 ft. 5 in. at the muzzle and 3 ft. at the breech; the bore is 12 in. in diameter. The other gun is 19 ft. 10 in. long, with 1 ft. diameter at the muzzle and 1 ft. 6 in. diameter at breech.

On the Landa Kasab bastion, W. of the Fateh Gate and near the road from the Andu Masjid leading through the S. wall, is also a fine gun measuring 21 ft. 7 in. long, with a diameter at the breech of

4 ft. 4 in., and at the muzzle of 4 ft. 5 in., which must weigh nearly 50 tons.

There are several Tanks in Bijapur. The principal one is the *Taj Bauri*, named after Taj Sultana (29), 100 yds. inside the Makka Gate. The E. wing of the façade of the tank is partly ruined and partly used as a Municipal store-house. The W. wing is occupied by the municipal offices. Two flights of steps lead down to the water beneath an arch of 34 ft. span and about the same height, flanked by two octagonal towers. The tank at the water's edge is 231 ft. square. The water comes partly from springs and partly from drainage, and is 30 ft. deep in the dry weather.

The *Chand Bauri*—named after the famous Chand Bibi, the central figure of Meadows Taylor's "A Noble Queen"—in the N.W. corner of the city, was built in 1579 A.D., on the model of the *Taj Bauri*, and also has a fine arch over the steps leading down to it.

1½ m. to the S.W. of the Shahapur suburb, situated to the N.W. of the city, is the tomb and Palace of Afzal Khan (p. 481). Adjoining the latter is a mosque of two storeys, and on a platform to the S.W. are eleven rows of tombs of women, which have given rise to the tale that they were the wives of Afzal Khan put to death by him. It will be remembered that the rise both of Sivaji and his father Shahji was intimately connected with the Bijapur kingdom, and it was only the contact of the Delhi Emperors with that which brought the Mahrattas into direct conflict with the Mughal power.

Waterworks.—Bijapur was supplied with abundant water by underground ducts. One source of supply was a spring beyond

the suburb of Torweh, 5 m. W. of the citadel; another was the Begam Tank, 3 m. to the S. Along the line of the water supply occur towers supposed to be for the purpose of relieving the pressure in the pipes. The people evidently appreciated the advantage of having plenty of cool water about them, and traces of innumerable baths and cisterns are found in every direction. The water from the reservoirs, for instance, in the ruined Palace of Mustafa Khan, ran into a tank, from which it brimmed over into narrow stone channels, which passed in circuitous courses through the gardens, running over uneven surfaces to give it a sparkling and rippling effect.

Not long ago waterworks were constructed at Bhutnal, about $4\frac{1}{2}$ m. N.W., and are worth a visit.

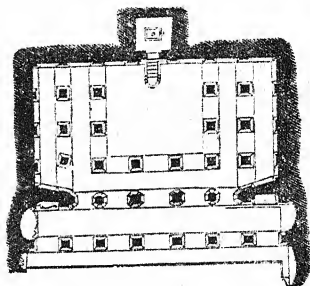
The jail, the way to which passes between lines of mausolea, big and small, is located in an old musafarkhana or caravanserai of remarkable size and proportions, and is well worth a visit. Close to it, the *Amin Dargah*, of considerable importance, has a collection of old pictures.

From Bijapur the line continues to

113 m. Bagalkot, S. of the Krishna River. Some 25 m. E. from this on the river was fought the famous Battle of Talikota on 23rd January 1565, which caused the downfall of the Vijayanagar kingdom (p. 516). The small town of Talikota lies 30 m. N. of the field of battle.

129 m. Badami station. A District Bungalow close to the station and a smaller Inspection Bungalow in the town are generally available for tourists, on previous application to the Collector. The fort of Badami is to the N.E. of the town, 3 m. E. from the railway station, and on the heights above

are some picturesque temples, from which there is a fine view. To the S. is another rocky, fort-crowned hill, in the face of which are four cave temples. The two hills (about 400 ft. high) approach so close to each other as to leave only a gorge, into which the town extends. E. of this is a fine tank. Badami was once the capital of the Chalukyas.



Cave at Badami, from a plan by Dr Burgess.

Three of the **Cave Temples** are Brahman works, and date from 550 A.D. to 580 A.D.; the fourth is Jain, and probably dates from 650 A.D.

Dr Burgess writes of them: "They stand as to arrangement of parts between the Buddhist viharas and the later Brahmanical examples at Ellora, Elephanta, and Kanheri. The front wall of the Buddhist vihara, with its small windows and doors, admitted too little light; and so here, while retaining the veranda in front, and further protecting the cave from rain and sun by projecting eaves, the front of the Sala, or 'hall,' was made quite open, except the spaces between the walls and the first pillars from each end. In the sculptures—at least of the second and third caves—Vishnu occupies the most prominent place. In style they vary much in details, but can scarcely differ much in age; and as the third contains an inscription of Mangalesvara, dated Saka 500=578 A.D., we cannot be

far wrong in attributing them all to the 6th century. The importance of this date can scarcely be overestimated, as it is the first of the kind yet discovered in a Brahmanical cave." In the veranda of the *First Cave*, excavated about 50 ft. up in the face of the rock, and consecrated to Siva, are four pillars and two pilasters. The two pillars to the S. have been broken by lightning, and are now supported by wooden blocks. The pillars are slightly carved in relief to about half-way from the top. The whole rests on a stylobate, along the front of which are Ganas (dwarf attendants of Siva) in all sorts of attitudes. On the left of the veranda is a dwarpal with a Nandi over him. Opposite this dwarpal is a figure of Siva, 5 ft. high, with eighteen arms, dancing the tandava.¹ Between it and the cave is a chapel, and beyond an antechamber leading to the hall. In it, on the left, is Vishnu, or Harihara, with four hands, holding the usual symbols, and on the right the Arddhanariswar, or combined male and female figure, attended by a Nandi bull and the skeleton Bringi. A figure of Maheshasuri, or Durga, destroying the buffalo-demon Maheshasur is on the back wall, on the right wall Ganpati, and on the left Skanda. Between the antechamber and the hall are two pillars only. The hall has eight columns of the Elephanta type, and measures 42 ft. by 24½ ft. The ceiling and that of the antechamber are divided into compartments by carved beams. In the centre compartment of the former is a relief of the Great Snake's head. At the back of the hall is a small chapel with a lingam.

The Second Cave Temple is rather higher up the cliff, and has a fine view. At the ends of the platform in front of it are two dwarpals with a female attendant. Four

square columns, finely carved, separate the platform from the veranda, on the left of which is the Vahara Avatar, or Vishnu in the form of a boar, and on the right the Dwarf Avatar of Vishnu, dilated to an immense size, putting one foot on the earth and lifting the other over the heavens. On the ceiling in front of this is Vishnu with four arms, riding on Garuda, and in the central square of the ceiling is a lotus with sixteen fishes round it. On the top of the wall in a frieze are the figures of Vishnu as Krishna. The entrance to the inner chamber, 33 ft. by 23½ ft., is like that of the first cave; the roof of the chamber is supported by eight pillars; and the corbels are lions, human figures, vampires, elephants, etc. The adytum has only a square *Chavara*nga, or altar.

A sloping ascent and more flights of steps lead up to a platform, and a few steps beyond to a doorway; on the right of it is an inscription in old Kanarese. At the top of yet another flight of steps is the platform in front of

The Third Cave, below a scarp of 100 ft. of perpendicular rock. This cave, says Dr Burgess, is "by far the finest of the series, and, in some respects, one of the most interesting Brahmanical works in India." The façade is 70 ft. from N. to S., and has six square pillars and two pilasters 12½ ft. high. Eleven steps lead up to the cave, and on the stylobate Ganas are represented in relief. The brackets of the pillars represent male and female figures, Arddhanariswar, Siva, and Parvati, and on the columns themselves are carved elaborate festoons, and below medallions with groups of figures. Traces of painting are visible on the under side of the eaves and the roof of the veranda. At the W. end of the veranda is a statue of Narsingh, the fourth incarnation of Vishnu, a very spirited figure, 11 ft. high.

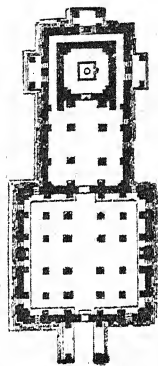
¹ See descriptions on pp. 23-24.

On the S. wall is Harihara, of the same height, and beyond the veranda at the side of the first is the Dwarf or Vamana Avatar. At the E. end is Narayan, seated under Sheshnag. On the outer side of this is Vishnu reclining on a great snake, and on the inner wall is the Varaha, or Boar, incarnation; to the right is an inscription in Kanarese. Between the veranda passage and the hall are four pillars. The hall measures 65 ft. by 37 ft. Eight pillars, four to the front and two to the sides, form a space in front of the shrine; and on each side is a recess separated off by three pillars. The ceilings are divided into compartments throughout, with carved panels.

The Fourth, or Jain Cave, lies W. of the other three. The platform beyond the wall overlooks the lake or tank, and commands a fine view. A broad overhanging eave has been cut out of the rock in front of this cave. The façade has four carved pillars and two pilasters. On the left of the veranda, 31 ft. by 6½ ft., is the Jain divinity Parasnath, with bands round his thighs and cobras coming out below his feet. On the right of the veranda is a Gautama Swami attended by snakes. The hall behind is 25 ft. by 6 ft.; in the shrine is a seated statue of Mahavira.

At Pattadakal, 10 m. N.E. of Badami, on the left bank of the Malprabha River, accessible only by cart or pony, are several temples, both Brahmanical and Jain, dating from the 7th or 8th century. They "are very pure examples of the Dravidian style of architecture; they are all square pyramids divided into distinct storeys, and each storey ornamented with cells alternately oblong and square. Their style of ornamentation is also very much coarser than that of the Chalukyan style, and differs very much in

character. The domical termination of the spires is also different, and much less graceful, and the overhanging cornices of double curvature are much more prominent and important" (Burgess). Besides these, the village possesses a group of temples, not remarkable for their size or architectural beauty, but interesting because they exhibit the two principal styles of Indian architecture, in



Temple at Pattadakal.

absolute juxtaposition (see *Architecture of Dharwar and Mysore*, pp. 63, 64). The Temple of *Papnath* is of the N. style, and is probably rather older than that of *Virupaksha*, which dates from the early part of the 8th century. The Temple of *Papnath* is 90 ft. long, including the porch, and 40 ft. broad. There are sixteen pillars in the hall and four in the inner chamber, exclusive of those in the porches.

At Aiholi, 8 m. to the N.E. of Pattadakal, there is a very numerous collection of archaic temples, well worth a careful visit. The *Durga Temple* has some very remarkable carving; and here, too, are many dolmens.

Aiholi can best be reached from Katgeri station, at a distance of

about 12 m. from the railway ; for 8 m. there is a good tonga road.

170 m. from Hotgi is Gadag junction station (R., D.B.). From Gadag the railway runs E. to Guntakal junction and W. to Hubli junction (for Bangalore and Mysore), Dharwar, and Londa junction.

Gadag (anciently *Kratuka*) is a town of 30,429 inhabitants. The town is rapidly rising in importance as a railway junction and centre of cotton trade. There are a spinning and weaving mill and numerous cotton gins, besides presses. The cotton market with its numerous spacious godowns on both sides of a broad road lined with beautiful trees, and the Maconachie Market lately constructed in the centre of the town at a cost of Rs.6000, are considered to be the best designs in the whole of the Presidency. In its N.W. corner is a *Vishnavite Temple*. The entrance is under a high gateway or gopuram, with four storeys, and 50 ft. high. The door is handsomely carved with sixteen rows of figures in relief on either side. The *Someswara Temple*, now a school, is richly decorated throughout.

In the fort is a fine *Temple* dedicated to *Trimbakeswar* or, as sometimes said, to *Trikuteswar*, the "Lord of the Three Peaks." The outside is one mass of most elaborate carving. Two rows of figures run along the entire front and back ; those of the lower row are 2 ft. 9 in. high, including their canopy, and are 156 in number. In the upper row are 104 figures, 13 in. high, 52 in the front, and the same in the back. Between the four pillars on the E. is a colossal bull. Immediately behind the main portion of the temple, to the right of the enclosure, is a *Temple to Saraswati*. The porch is the finest part of it ; it contains eighteen pillars, some of them exquisitely carved, and six pilasters.

The three first of the two centre rows of pillars deserve particular notice for their elegance of design and exquisite carving.¹ There are numerous inscriptions at the temples, one of which has the date Shaka 790 = 868 A.D.

Lakkandi (anciently *Lokkikandi*) is about 8 m. S.E. of Gadag, and about half that distance from Harlapur station. The place is full of ancient temples.

The façade of the *Kashi Vishwanath Temple* has been supported by four pillars, of which that to the N. has gone. The doorways are elaborately carved, and though the roof is ruined, the temple is by far the handsomest in *Lakkandi*, and well worth seeing ; but, being built of coarse granite, the carving is not so clear and sharply defined as in the case of other famous temples.

To the W., on the opposite side of the road, is a *Temple to Nandeswar*, or "Siva, Lord of the Bull Nandi." There is a Kanarese inscription on the ledge of the W. division of the roof, between the four pillars. It stands on the N. side of a tank, which it overlooks.

The *Temple of Iswara*, the roof of which has fallen in, is very old ; the exterior is handsomely carved, and is said to be the work of *Jakanacharya*, the great sculptor (p. 531).

A narrow path, thickly shaded for about 100 yds., leads from it

¹ Colonel M. Taylor says : "It is impossible to describe the exquisite finish of the pillars of the interior of this temple, which are of black hornblende, or to estimate how they were completed in their present condition, unless they were turned in a lathe ; yet there can be little doubt that they were set up originally as rough masses of rock, and afterwards carved into their present forms. The carving on some of the pillars and of the lintels and architraves of the doors is quite beyond description. No chased work in silver or gold could possibly be finer, and the patterns to this day are copied by goldsmiths, who take casts and moulds from them, but fail in representing the sharpness and finish of the original."

to a *Baoli*, or well, the sides of which are faced with stone. There are flights of steps to the water on three sides, and on either side of the first step is an elephant, so well carved that the natives may be believed when they say that it is the work of Jakanacharya.

About 200 yds. from this, on the W. side of the tower, is a *Temple to Manikeswar*, a name of Krishna, so called because every day he gave to Radha a ruby, which is called a manik. A very pretty small tank adjoins the temple. It is faced with stone, and has several buttresses projecting into the water, said to be carved by Jakanacharya. On either side of the entrance into the temple are four pillars of black basalt. This temple is surrounded by beautiful trees of great size.

From Gadag the line turns W. to

206 m. Hubli junction station (R.) (line S.E. to Harihar and Bangalore, Route 31). Population 61,440. Important junction, and the chief centre of the cotton trade in the Southern Mahratta country. Contains the workshops for the metre-gauge rolling stock of the M. and S.M. Railway system. Has a spinning and weaving mill and numerous cotton gins and presses.

219 m. Dharwar station (R., D.B.). This is a very important centre, being the old headquarters of the Southern Mahratta Railway. Dharwar is a large open town on the watershed, but 20 m. inland from the edge of the ghats, with a population of 30,289. Headquarters of the District of Dharwar, residence of the Collector, District Judge, and other officers. The S.M. Railway headquarters were removed to Madras in 1908 on amalgamation with the Madras Railway; but the Chief Engineer of the metre-gauge line, District

Traffic Manager, and other officers, still reside at Dharwar. The largest building, so conspicuous from the train, holds the railway offices. The District jail is noticeable as being now largely given over for a juvenile jail on the Borstal system, the first of its kind in W. India.

On the N. is the *Fort*, which was taken from the Mahrattas by Hyder 'Ali in 1778, and stood a siege in 1789 from a British force co-operating with the Mahratta army under Parshuram Bhao. It next belonged to Tipu; and one of his ablest Generals, Badr-ul-zaman, with 7000 regulars and 3000 irregulars, having thrown himself into it, defended it with great spirit. After a protracted siege of twenty-nine weeks the brave Badr-ul-zaman surrendered on condition of being allowed to march out with all the honours of war. The allies took possession of the fort on 4th April, and the Mahrattas attacked Badr-ul-zaman as he was marching away, wounded him, made him prisoner, and dispersed the forces. Little remains of the fort, which is occupied by the Civil Hospital and a number of bungalows and smaller houses.

The *English Church* is $\frac{1}{2}$ m. W. of the D.B., and was built in 1886. There is a Resident Chaplain on the Bombay establishment, who also has charge of Hubli, Gadag, Bijapur and Castle Rock. There is also a *Roman Catholic Church*, built in 1845. The last detachment of regular troops was removed in 1884, and the site of the old Cantonment is occupied by police lines.

The Karnatak (Carnatic) College, one of the local colleges affiliated to the Bombay University, was opened at Dharwar in the summer of 1917. At present, part of the Training College buildings is lent for its use, but a site has been selected for the future buildings on the hills to the S.W. of the town.

Besides this college there are the Training Colleges for Teachers of both sexes, and a High School.

Sixty yds. from the D.B. is an obelisk to the memory of Mr St John Thackeray, Principal Collector and Political Agent, Southern Mahratta Doab, killed in the insurrection at Kittur, 23rd October 1824; and of Mr J. C. Munro, Sub-Collector, who died of wounds received at the reduction of that place. Mr Thackeray was an uncle of the novelist.

Nargund, headquarters of the Petha of that name, is not easily accessible, but its compact hill-fort rising straight out of the plain is a conspicuous object on clear days from Dharwar and from the Gadag-Hotgi Railway. It was one of the strongest forts in the Karnatak. During the mutiny the Chief of Nargund, Bhaskarrao Appasaheb *alias* Baba Saheb—rose and in the last week of May 1858 murdered Col. Manson, Political Agent of the Southern Mahratta country, by night at a village N. of Nargund and had his head affixed to the gate of the town. The fort was afterwards stormed by British troops, the Chief taken and executed, and his State annexed. The head of Col. Manson was buried in Nargund, but was afterwards exhumed and buried in Bombay cemetery, a cenotaph only remaining in the town of Nargund. After ceasing to be of military value Nargund Fort became a favourite haunt of panthers.

The line continues W. to

278 m. from Poona, Londa junction (p. 486).

ROUTE 29.

WADI JUNCTION to HYDERABAD.
Secunderabad, Warangal, and Bezwada, with expedition to Bidar.

H. H. the Nizam's State Railway.

376 m. from Bombay, Wadi junction station (R.) (see p. 476).

10 m. Chittapur station.—Extensive silk manufactures. About 1 m. to the S. is Nagai, a deserted town, with ruined temples dating from 1050 A.D. In one of them is a life-size bull cut out of a solid block of basalt.

24 m. Seram station.—A richly-carved temple, of 1200 A.D.

44 m. Tandur station (R.).—Small and large game.

57 m. Dharur station for Bidar, 40 m. distant.—Railway bungalow, which can be occupied by permission from Hyderabad.

Bidar, Vidarba. This capital, first of the later Bahmani Kings and then of the separate Barid dynasty, which maintained itself for only fifty years, is well deserving of a visit on account of the extremely picturesque walls and defences which still surround it, the fine, though partially ruined, College of Khwaja Mahmud Gawán,¹ resembling those of Samarkand and Bukhara, and the tombs of the Bahmani and Barid Kings, including that of Humayan the Cruel, known as the Khūni Sultan. Arrangements for the journey must be made from Hyderabad, and it will be desir-

¹ The date is 1471 A.D. This Minister, who long upheld the dynasty, was unjustly put to death by Muhammad Shah II.

able to obtain an introduction to the local State officials. Though Bidar is the headquarters of the fourth Suba of the State, the Subadar usually resides in Hyderabad., Bidar *Bidir* work, so named from it, of silver inlaid on iron, was once famous, but is now inferior to that of Lucknow.

100 m. Lingampalli station. Soon after this the line is very picturesque, dotted with numerous granite peaks and isolated rocks. This stone belt extends to Bhongir, 28 m. E. of Hyderabad.

115 m. HYDERABAD station * $1\frac{1}{2}$ m. from the nearest city gate. —The capital of H.H. the Nizam's territory (lat. $17^{\circ} 22'$ N., long. $78^{\circ} 30'$ E.). The city (population, with suburbs, 500,623) stands on the S. bank of the Musi River, with Golconda to W., and the Residency and its bazars and the Cantonments of the British troops and the Contingent to the N.

The State of which Hyderabad is the capital covers 82,000 sq. m., with a population of 11,141,142, and is by far the largest in India. The present ruler is Hon. Lieutenant General His Highness Asaf Jah Muzaffar-ul-Mulk, Nizam-ul-Mulk, Nizam-ud-Daula, Nawab Sir Mir Usman Ali Khan Bahadur, Fateh Jang, G.C.S.I.¹

There have been ten¹ Nizams since the dynasty was founded in 1740 A.D. by Asaf Jah Nizam-ul-Mulk (Subadar or Viceroy of the Deccan from 1713 onwards), four in the 17th century, all sons of the first Nizam, and five in the 19th; the present ruler succeeded in 1911. The sons of Asaf Jah played a very prominent part in matters connected with the growth of the power of the East India Company in S. India. The

city is famed for its warlike and varied population. Formerly the inhabitants always carried weapons. The practice is now confined to the old Arab mercenaries, who may be seen disporting themselves in the streets with a perfect armoury of weapons stuck in their waistcloths.

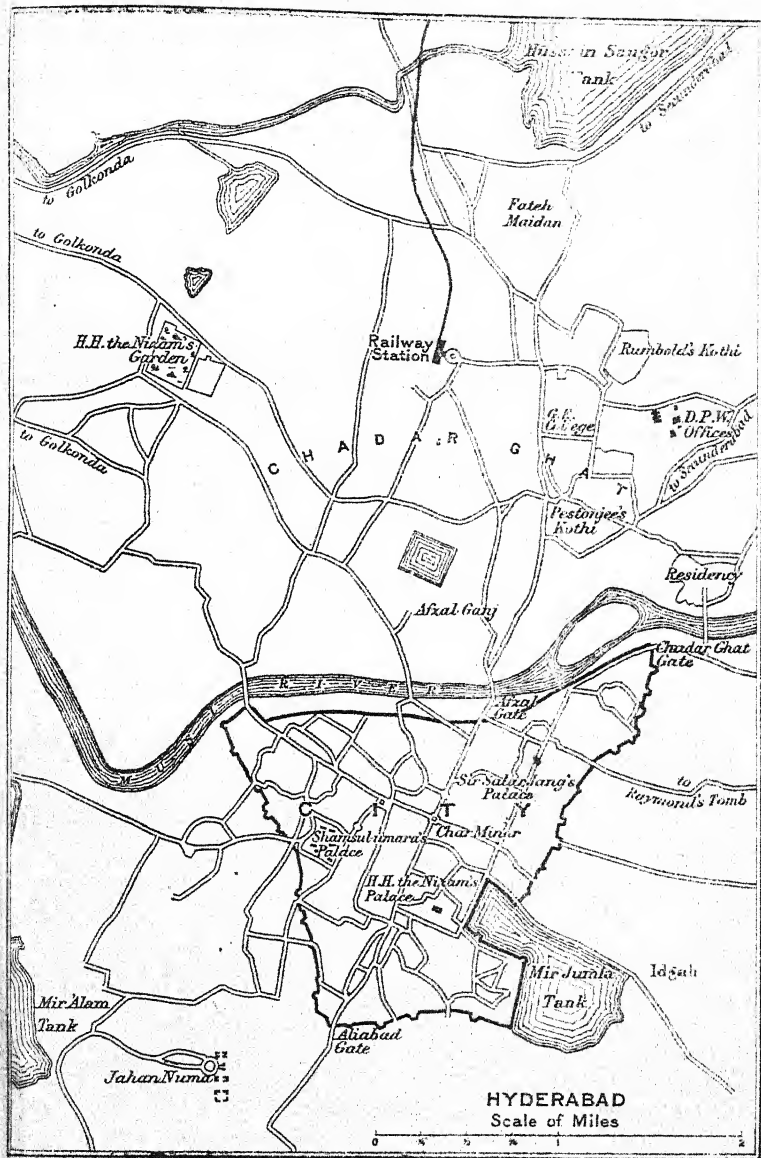
The place maintains a considerable manufacture of textile fabrics, carpets, velvets for horse-trappings, and a material composed of cotton and silk. Red earthenware is also extensively made here.

To the N. of the railway station are the beautiful *Public Gardens*, covering an extensive area, and surrounded by a high wall castellated with two lofty gateways. In addition to rare plants and well-laid-out beds of flowers, the *Gardens* contain a large lake, a menagerie, lawn-tennis courts, a bandstand, and an iron pavilion. In the N. corner a Town Hall has been planned, which will commemorate the anniversary of the fortieth birthday of His Highness the Nizam.

Outside the gardens to the N. is a picturesque Black Rock—the *Naubat Pahar* or "Band Rock"—so called from the fact that in olden times all official communications of the Mughal Emperors with Nizams were proclaimed from this rock to the sound of music. N. of the gardens is the Saifabad Cantonment of the Nizam's regular troops, and S. are the lines of the Imperial Service Troops. S.E. lies the *Fateh Maidan*, a plain which is the Nizam's polo-ground.

The Residency stands about $1\frac{1}{2}$ m. S.W. of the railway station, and N.E. of the city, in a suburb called Chadarghat, and is surrounded by a bazar containing 12,000 inhabitants. The grounds are extensive and full of grand old trees, and are enclosed by a wall, which was strengthened by Colonel Davidson after the attack

¹ The principal Nizams have been Nasir Jang, Salabat Jang, Nizam Ali (d. 1803), Sikandar Jah (d. 1820), and Nasir-ud-daula (d. 1857). Asaf Jah was the son of the first Ghazi-ud-din (p. 264), Subadar of Berar, and the real conqueror of Bijapur; he died at the age of 104, and is buried at Rauza (p. 102).



upon the Residency on the morning of 17th July 1857. That attack was made by a band of Rohillas and others, and was repulsed by the troops at the Residency under Major Briggs, Military Secretary. The bastions commanding the approaches were erected then.

On the site of the Residency there was formerly a villa belonging to a favourite of Nizam 'Ali, and in it Sir John Kennaway, who was appointed Resident in 1788, was received. The present Residency was built 1803-8. The N. front, with the Grand Entrance, looks away from the Musi River and the city. Among the trees are four enormous specimens of the *Ficus indica*, the trunk of one measuring 30 ft. round. There is also a very gigantic tamarind-tree. The park contains an obelisk raised to the memory of Lieutenant William John Darby, who was killed in 1815 within the city of Hyderabad, while gallantly leading the Grenadiers in a charge against some rebels.

Within the Residency limits is the Pestonji Kothi, a large building erected on a high stone basement by the famous Parsi bankers, Pestonji & Co., who farmed the revenues of Berar from 1839-45. Close to the Kothi is the St George's Church, adjoining which is the old burial-ground, now abandoned. The most remarkable tomb in it is that of William Palmer, who was styled "King" Palmer, and was the head of the banking firm bearing his name. Farther N. on the same side of the road is the Roman Catholic Chapel, a two-storeyed building standing on the summit of a hill and commanding an extensive view. Near the chapel is one of the old French gun-foundries erected by M. Raymond.

The City is in shape a trapezoid. The total area is 2 sq. m.; it is modern, and has but few remarkable buildings, but the *bazars*

are extremely picturesque and thronged with natives from all parts of India. On the N.W. side are five *Gateways*—viz., on the extreme E. the Chadarghat Gate; next, to the W., the Delhi or Afzalganj Gate; next, in the same direction, are the Champa, the Char Mahal, and the Old Bridge Gates in succession. In the S.W. side there is, first, the Dudhni Gate, then the Fateh, which is exactly in the centre, and then the 'Aliabad, in the S.W. corner. In the S. side are the Gaulipura and the Ghazibanda; and on the E. side are the Mir Jumla, the Y'akutpura, and the Dabirpura Gates.

The Musi River, on the N. side, is crossed by four *Bridges*. Farthest to the E. is the Oliphant Bridge, which was erected in 1831 by Colonel Oliphant, of the Madras Engineers. The next bridge to the W. is the Afzalganj Bridge, and then comes the Old and the Musallam Bridge. N. of the second bridge are the *Residency School* and the *City Hospital*. The *Afzalganj Masjid* (Mosque), which adjoins the hospital to the N., is a fine building with four lofty minarets. On the other side of the road is a *parda* hospital for women, the foundation-stone of which was laid by H.M. Queen Mary then Princess of Wales on 9th February 1906. The establishment can be inspected by ladies only. The Musallam Bridge, built in 1898 A.D. by the late Nawab Laik-ud-daula, and the Old Bridge were the only ones which withstood the terrible flood of 1908. This flood caused the loss of over 3000 lives and the destruction of 24,000 houses.

Inside the Afzalganj Gate is a broad street, which runs right through the city. A few hundred yards on the left is the *Palace of the late Sir Salar Jang*, G.C.S.I., whose able administration of the State from 1853 to 1883 is a matter of history. The great

drawing-room contains a number of portraits of former Residents and other distinguished personages. Close to it is the Chini Khana, about 14 ft. square and 12 ft. high, covered with china cemented to the walls. A little beyond the Palace, to the N. of it, is the 'Ashur Khana, which is well worth a visit. The original part of the building, which consists of a hall, was built by Muhammad Kuli Kutb Shah in 1597. The walls are adorned with Persian enamels, which are extremely rich in colour and compare favourably with the best work at Multan and Lahore. Farther along the central street is a rectangular building with four minarets, hence called the *Char Minar*, 186 ft. high and 100 ft. wide on each side, built in 1591; it occupies the central position in the city where the four main roads meet. Just before reaching it the road passes under an arch called the *Machhi Kaman*, or "Arch of the Fish," the fish being a badge of high rank. There are four arches 50 ft. high across the streets, one to each quarter of the compass. A little to the E. of the Char Minar is the *Mecca* (Makka) *Masjid*, the principal mosque in the city; the gateway was completed by Aurangzeb in 1692. It is a grand but sombre building, with four minars and five arches in front, occupying one side of the paved quadrangle 360 ft. square—date, 1614 A.D. In the quadrangle are the graves of all the Nizams since the first. Close to the *Char Minar*, and to the left of the main road, a narrow lane leads to the *Jami Masjid*, erected in 1598 A.D. by Sultan Muhammad Kuli. The mosque is without architectural pretensions, but is the oldest in Hyderabad.

The Nizam's Chaumahala Palace lies to the S. of the Char Minar, 2½ m. from the Residency; from the Chawk a fine gateway leads to a large quadrangle. At the

S.W. corner of this a narrow road leads into a second quadrangle, in which are generally a great number of horsemen, etc.; a passage from the S.W. corner of this leads into a third quadrangle, where many attendants are also generally to be found. The buildings on each side are handsome, and resemble the Shah's Palace at Teheran, but are finer.

During the Muharram H.H.'s troops, to the number of 30,000, pass in procession in front of the palace, and the spectacle is altogether a very magnificent one. The procession takes place on the 5th of Muharram: it is called the *Langar*, and is said to be in honour of Muhammad Kuli Shah, the sovereign who built the Char Minar and the Mecca Masjid. Various stories are told about this procession. It is said that *Langar* (a chain) means the chain with which an elephant is confined, and that Muhammad Kuli Shah was run away with by an elephant, which suddenly became furious and rushed about for three days, keeping the king without food and in peril of his life. On the third day it became tractable, and the *Langar* was fastened on it. In a side street 200 yds. beyond the Palace is the house in which the well-known Minister Chandu Lal died. It is a low but highly-ornamented Hindu house.

Near the W. wall of the city is the vast palace of the *Barahdari*, which was built by the Shams-ul-umara. It covers a large space, is handsomely furnished, and contains a gigantic suit of armour and sword belonging to Tegh Jang, the founder of the family, whose stature is said to have been 6 ft. 6 in.

The *Jahannuma*, also built by the Shams-ul-umara, in a suburb of the same name outside the Aliabad Gate, is reached by a causeway built across rice-fields. Adjoining it is a very long approach, consisting of neatly-

built houses, forming two narrow ellipses.

To the S. of the city, standing on a hill, is the *Falaknuma Palace* of His Highness the Nizam, which is considered the finest in India. It was built as a private residence by the late Minister, Sir Vikar-ul-umara, but was afterwards purchased by the Nizam for the sum of 35 lakhs. The approach to the Palace is by a beautifully-constructed hill road, at the end of which is a fine gateway. The Palace stands on a terrace, the front part of which is artistically laid out in flower beds in the English style. The façade is Grecian, the cornice resting on a double row of Corinthian columns. The handsome vestibule, the walls of which are beautifully painted, is fitted with marble seats surrounding a marble fountain. The vestibule leads into the waiting-room, adjoining which are the Library and Council Chamber. The staircase to the upper floor is of marble, with beautifully-carved balustrades, supporting at intervals marble figures with candelabra. On the walls are oil paintings of His Highness the Nizam and the past Residents and other notable personages of the State. The Reception-room is decorated and furnished in Louis XIV. style. The Ballroom, the Dining-room, the Smoking-room, and bedrooms are all artistically furnished. From the upper floor a fine view can be obtained of the city, the Mir 'Alam Tank, and the surrounding country. Since it came into the possession of His Highness the Palace has been provided with electric installation, and a wing has been built, unfortunately in a style out of harmony with the original design, as a Museum of Indian Industries. Passes to visit the *Falaknuma Palace* are not obtainable through the Residency at Hyderabad.

2 m. W. of the city Palace is the *Mir 'Alam Tank*, a lake 8 m.

round. The embankment is formed of twenty-one arches, side by side, presenting their convex surfaces to the pressure of the water. It is 1120 yds. long, and was built by French engineers at a cost of £80,000. It was commenced by *Mir 'Alam*, the great Minister of the Nizam, who led his master's forces during the war with Tipu Sultan in 1799, the prize-money which fell to his share after the fall of Seringapatam being used for the construction. The embankment was, however, completed in 1811 by his son-in-law, Munir-ul-Mulk (1809-32), the father of Sir Salar Jang I. The *Mir 'Alam Lake* is now used as a reservoir for supplying a large portion of the city with water. Filter-beds have been constructed in proximity to the embankment, from which water is led by gravitation. A number of steam-launches are maintained on the lake, and water-parties are given to distinguished visitors. At the extreme W. end of the lake, which has picturesque coves and windings, is a wooded hill about 80 ft. high, surmounted by a building which is the *Dargah*, or shrine, of *Mir Mahmud*. This is a beautiful structure and well placed, looking down on the waters of the lake that ripple at the foot of the cliff on which it stands. It is small but symmetrical, and was once covered with blue tiles.

EXCURSIONS FROM HYDERABAD.

(1) The Tomb of M. Raymond. This lies in Sarav¹ Nagar (Cypress Town), 3 m. from the Oliphant Bridge to the S.E. of the city, and stands on very high ground. The tomb consists of an obelisk of grey stone, 25 ft. high, with simply the letters "J. R." on each side, placed on a spacious platform. At the end of the platform is an edifice

¹ Some call it Sarur Nagar (Pleasure Town).

like a Grecian temple. No date is recorded; but the gallant Frenchman in whose honour this fine structure has been erected died in March 1798. At the time of his death he had 15,000 well-disciplined troops at his command, and possessed more power than the British Resident.

(2) **GOLCONDA.** The Fort and Tombs lie 5 m. W. of the city, lat. $17^{\circ} 22' N.$: long. $78^{\circ} 26' 30'' E.$ Golconda was the capital of the Kutb Shahi kingdom,¹ the third great Muhammadan dynasty of the Deccan, which lasted from 1507 to 1687, till overthrown by the Emperor Aurangzeb. For permission to visit the fort application must be made in writing at least two days before the proposed visit to the Second Assistant Resident at Hyderabad. Unless at least two days' notice is given, no pass will be issued on any account. The Fort is surrounded by a strongly-built crenellated stone wall or curtain, a little over 3 m. in circumference, with eighty-seven bastions at the angles, on which there are still some of the old Kutb Shahi guns. The walls and bastions are built of solid blocks of granite, many of which weigh considerably over a ton. The moat which surrounds the outer wall is filled up in many places. The fort originally had eight gates, but of these two only are now in use—namely, the Banjara and Fateh (by it Prince Muazzam entered, leading his troops) the Mecca and Jamali. It was besieged by Aurangzeb, while Viceroy of the Deccan, in treacherous concert with the Minister Mir Jumla, and was taken by him, as Emperor, after a desperate defence of eight months by the last King, Abul

Hasan, Abdur Razzak Khan Lari being the hero of the siege. When the first of the Nizams took possession of the place he added a new wall to the fortifications on the E., so as to include a small hill formerly situated outside the fort. The large sheet of water in front of this portion of the fort is styled the *Langar Talao*.

The *Banjara Gate* is a massive structure of granite, some 50 ft. high, with platforms and chambers on either side for the guards, and a pair of high teakwood gates studded with iron wrought into various fanciful devices and huge sharp-pointed iron spikes, which were intended to prevent elephants from battering them in. The road from here passes straight through the fort to the gate on the N.W. side. A short distance from the gate is a large stone cistern said to have been built by Ibrahim Kutb Shah, which is connected with a tank some distance off by a line of underground pipes. The old buildings inside the Fort are more or less in a ruined condition and it is difficult to identify many of them. The Nau Mahal is comparatively a modern structure built by the early kings of the Asafya dynasty. It is surrounded by a high wall and stands in the midst of a pleasant garden of orange and other fruit trees.

Beyond the Nau Mahal there is a lofty granite structure, said to have been used as a Nakkar Khana (Music Gallery), which forms the entrance to the first line of the Bala Hissar or citadel fortification. A little to the right of this is the Jami Masjid, a small building, the roof of which is supported on five rows of arches about 12 ft. high. An Arabic inscription over the gateway states that it was erected by Ibrahim Kutb Shah in 1569. The Bala Hissar is on the summit of the hill enclosed by several tiers of fortifications. Passing through the gateway on the left side are the remains of the

¹ This kingdom included all the country from Golconda in the west to the east sea-coast from Orissa to the Krishna. For a detailed account of it, see Major Haig's *Historic Landmarks of the Deccan*.

Sila-Khana (Arms House) and the Zenana palaces. The ascent to the summit is accomplished by a series of roughly paved steps. Half-way up is a large well from which the garrison used to get its water-supply. A short distance from here are the ruins of the Ambar Khana, or King's Stores. A slab of black basalt, which has fallen from its position over the entrance, contains a Persian inscription to the effect that the Ambar Khana was built during the reign of Abdullah Kutb Shah. The N. portion of the ground enclosed by the wall has very few ruins upon it, although it was at one time most thickly populated; indeed, the ground inside the walls is said to have been so valuable that it used to sell for one ashrafi (Rs.20) per yard. The E. and S. portions are strewn with the ruins of palaces, mosques, and the dwelling-houses of the nobles and retainers of the Kutb Shahi Kings. Inside the Fateh Gate are two buildings constructed by the French as arsenals. Farther on are the Kiladar's (Commandant's) House and the Mubarez-ud-daula Palace, and to the S. of these two large enclosures with underground galleries, which probably served as magazines. In front of the citadel, which rises finely some 350 ft. above the rest of the fort, is a triumphal arch. The paved path leads up through various gateways, and under many picturesque half-ruined defences, to the summit of the citadel, on which are the remains of a lofty palace, the two-storeyed Barahdari, affording a splendid view of all the country round; on the roof is a stone throne. The upper storey has a spacious hall with side rooms and a large courtyard in front.

The Kings' Tombs. About 600 yds. to the N.W. of the fort stand on the plain the tombs of the Kutb Shahi Kings, who reigned for 180

years in Golconda. They are reached from the fort and citadel by turning N. from the entrance to the latter and passing a fine stone tank to the N.W. corner of the former. The tombs were much neglected until they were repaired at the instance of the late Sir Salar Jang, when the gardens which had formerly existed around some of them were also replanted and the whole enclosed by a substantial stone wall: pleasant walks with fine shade and fruit trees to each tomb were laid out. The tombs standing within the garden enclosures are those of:

- (1) Sultan Kuli Kutb Shah, 1512-43.
- (2) Jamshaid Kutb Shah, 1543-50.
- (3) Ibrahim Kutb Shah, 1550-80.
- (4) Princess Hayat Bakhsh Begam, daughter of (3), -1617.
- (5) Muhammad Kuli Kutb Shah 1580-1612.
- (6) Muhammad Kutb Shah, 1612-26.

Beside these the gardens enclose a large number of minor tombs and mosques. The tombs of the last two kings of the dynasty (1507-1687) are situated outside the enclosure. Muhammad Kuli Kutb Shah, who died in 1020 A.H. = 1612 A.D., was the king who founded the city of Hyderabad, and erected many public edifices and Palaces, and his is the finest of the tombs, being 168 ft. high from the base-mment to the summit of the dome. Beyond this is the tomb of Ibrahim Kuli Kutb Shah, the fourth King, who died in 988 A.H. = 1580 A.D. To the S. of it is the tomb of Sultan Muhammad Amin, King Ibrahim's youngest son, who died in 1004 A.H. = 1595 A.D. A short distance from here in a N. direction is the tomb of Kulsum Begam, and close to it is that of the first of the Kutb Shahi Kings, Sultan Kuli Kutb,

who died in 950 A.H.=1543 A.D. Between the walled enclosure and the fort walls is the tomb of the sixth King, Abdulla Kutb Shah, who died in 1083 A.H.=1672 A.D., after a reign of forty-eight years. This is one of the finest tombs here, being enriched with very fine carvings and minarets at each corner of the platform.

The last of the Kutb Shahi Kings, Abul Hasan, who was sent off by his imperial captor to end his days in the fortress of Daulatabad, and died there in 1701, is the only one not interred here.

The following quotation from a description of the tombs written by Captain Burton gives an admirable idea of their architectural and other details. "The prevailing style of the Golconda tomb is a dome standing upon an oblong or square, both of grey granite; the shape of the cupola is various, from the orange or rather the onion strangulata at the base, which is invariably arabesqued to the segment of a circle either straight with or bulging beyond the square; the finials are of silver, not of gold as in the modern city (Hyderabad) The parallelogram, single-storeyed in the smaller and doubled in the longer mausolea, is either plain above or capped with floriated crenelles like spear-heads. Many bear balustraded balconies of the most complicated patterns. The lower portion is invariably an arcade of pointed arches resting upon a raised quadrangular terrace of cut stone, which is ascended by four flights of steps. The prevailing colour is white, in some cases picked out with green. Each large tomb has its mosque or musalla (chapel), usually a hall or a hall-porch opening eastward, with a *mihrab* to the west, and flanked by minarets on either side. These towers are also of one general type: the cap is a bulb and neck, somewhat like the mosque dome in miniature; the body is a shaft, either circular or polygonal,

with a floriated gallery, single or double; whilst the foot is a pillar of larger dimensions than that above. The minarets are either engaged or unattached, and the general effect is top-heaviness. Many also are toy articles evidently never meant for use.

"The interiors of the sepulchres are arbitrarily laid out with interesting arches in infinite variety; and not a few of them deserve photographing. Flights of stairs lead up to the unbalconied galleries above, and down to the graves contained in the arches and alcoved basements. In the midst lies the occupant under a tomb of black marble or greenstone, the fine produce of the Krishna River quarries. The shape is oblong and stepped with six or eight slabs diminishing above. The top is either *bombé* or flat, in which case it is ornamented with a mimic *mihrab* (prayer arch), and the sides bear mortuary and devotional inscriptions in *Naskh* and *Nasta'alik* characters. From the four corners of the slab resting upon the base spring feet not unlike the claws of an old-fashioned sugar pot; and one or more of the steps bear lines of the horns which distinguish the altars of classical Greece and Rome."¹

The return to Hyderabad may be made by the N. road, passing at 1 m. to the N.W. the *Barahdari* and *Masjid of Bhagmati* (after whom Hyderabad was first called Bhagnagar), a favourite mistress of the Kutb Shahi King, Muhammad Kuli. On all sides rise masses of granite, gneiss, and low hills, taking from weather wear the most fantastic shapes, and sometimes appearing like subsidiary forts erected by the hand of man. The popular legend

¹ For a full description of these tombs see *Historic Landmarks of the Deccan*, by Haig, and *Historical and Descriptive Sketch of H.H. the Nizam's Dominions*, by Sayid Husain Bilgrami.

as regards the peculiarity of their position and appearance is that the Creator after finishing the construction of the world threw away the surplus material here.

The *diamonds* of Golconda, which have become proverbial, were cut and polished here, but came principally from *Purtial*, on the S.E. frontier of the Nizam's territory, and Kollur, in the Krishna District.

121 m. Secunderabad junction, * 5½ m. N. of the Hyderabad Residency, is the British military Cantonment, and one of the largest in India, covering 19 sq. m. It is the headquarters of the 9th Army Division. It stands 1830 ft. above sea-level. Two main roads lead from Hyderabad to Secunderabad. The old road runs along the bend of the *Husain Sagar*, 2 m. N. of the railway station, a fine lake about 11 m. in circumference, constructed by Ibrahim Kutb Shah (16th century) at a cost of 2½ lakhs. The principal feeder is a channel 36 m. long, which runs from the Musi River above Hyderabad. The lake forms the main water supply of Hyderabad, Chadarghat, and Residency limits. The water is pumped into filter-beds, from which it is distributed by means of iron pipes. The scenery on both sides of the bend is highly picturesque, and on a clear evening just before sunset a magnificent view may be obtained of Golconda and the far country in the W. At the Secunderabad end of the lake is a *Boat Club*, where pleasure-boats, both rowing and sailing, may be obtained. A regatta is held annually by the Club.

On the S. bank of the tank stands a large and extensive modern building surrounded by high walls, and known as the *Saifabad Palace*. Built originally as a suburban residence of the Nizam, it is now used for certain

public offices, the chief of which are the financial and the public works and railways. The Palace opens on the Saifabad Road by an elaborate and imposing iron gateway.

The other road, running along the W. bank of the Husain Sagar Lake, is of somewhat later construction. It passes through the new and growing suburb of Khairatabad, and leaving the Bidar Road just past the unfinished residence of the Nawab Fakhr-ul-mulk on a hill to the left, skirts the E. bank of the lake, rising to a height of over 20 ft. above the water. Some fine private residences dot the road on both sides. About a mile from Khairatabad the road crosses the Hyderabad Wadi line of railway just above the Husain Sagar junction. Here a new station called Begampet has been constructed for the convenience of military officers stationed at Bolarum, Trimalgiri, and Begampet. Passing over two Warren girder bridges, the road descends nearly to the level of the lake, rising again as it approaches Secunderabad. The Begampet lines, where an Indian Infantry regiment is stationed, lie to the left, and on the right a huge block of buildings, surrounded by a wall, marks the palace of the former Minister, Sir Vikar-ul-umara. Here the road joins the Secunderabad parade road.

The *Parade-ground* at Secunderabad is of immense extent, and admits of a large brigade manoeuvring upon it. On the N. side are many officers' houses, the railway station, which is handsomely built of granite, and the Church, which is large enough to hold an European regiment. On the S. side of the parade-ground is the cemetery, in which a vast number of officers are buried. S. of the Parade-ground is the large two-storeyed building of the *United Service Club*, with its Bachelors' Quarters, Ladies' Rooms, and Library. Close to the Club is the *Mud*

Fort, in which the staff offices are situated.

At Trimalgiri, 3 m. N.E. of Secunderabad, is an entrenched camp, which would serve as a place of refuge. The *Military Prison*, which stands due W. of the S.W. bastion of the entrenchment, is popularly called Windsor Castle, from its high tower and castellated look. The *European Hospital* is due S. of the S.E. bastion.

Bolarum, 6 m. N. of Secunderabad, and now incorporated with it, was the principal Cantonment of the Hyderabad Contingent Force. Under the arrangement made in 1902 with the Nizam (p. 113) this now ranks as part of the general Indian Army. There is also a Residency at Bolarum.

From Secunderabad a line runs up the Godavari Valley to Aurangabad and Manmar (Route 6).

149 m. Bhangir (R.).

202 m. Kazipet (R.). Kazipet is the station at which the headquarters of the Suba are situated, and where a visitor proposing to spend the night must stay by the courtesy of permission obtained at Hyderabad. About 4 m. from this station is Hanamconda, which contains a remarkably fine temple. The Hanamconda Temple (c. 1163) has been ruined by an earthquake, but is still well worthy of a visit as a fine specimen of the Chalukyan style of S. India. In front of the triapsidal temple was a splendid Hall of Columns; both of these are placed on high basements, and both contain numbers of elaborately-decorated pillars of very hard dark stone, with pierced screens between those

in the outer rows. It is dedicated to Rudra, God of Thunder. (See Fergusson's *Indian Architecture*, I, 432.)

A good road continues for about 10 m. more past the State Jail (well worth a visit for its carpet-weaving) to Warangal, the famous fortress capital. The whole visit from Kazipet to Hanamconda, and thence on to Warangal, can easily be done on a bicycle or by tonga, in one short day, with a visit to the jail thrown in: provisions must be taken.

208 m. Warangal station. About 1/2 m. from the station, visible thence only as a long line of earthworks, stands the noted Hindu fort city of Warangal. It was the ancient capital of the Kakatiya, or Ganapati, dynasty, which was attacked by Malik Kafur in 1309 and captured by Muhammad Tughlak in 1323, after which the kingdom disappeared. The most interesting of the objects inside the fort are the four gateways called Kirthi Stambhas, which were apparently openings to a square, and which reproduce wooden forms in every detail, the side struts being specially remarkable. There is also a small half-ruined temple with some capital figures of bulls in front of it. The fine hall and other buildings belong to the Muhammadan period. A line will probably be constructed N. from here to join the G.I.P. Railway at Chanda (p. 114). The present line now turns sharply S.E. to

261 m. Dornakal junction station (R.). Branch to Yellanda, 14 m. Here are the Singareni coal-mines of the Deccan Mining Company, on which 8000 coolies are employed, with rich beds of iron ore.

328 m. **Kondapalli station.** Ruins of a once celebrated fortress, built in 1360 A.D. It was taken by the Emperor Aurangzeb in 1687, and by the British, under General Caillaud, in 1766.

338 m. **Bezwada, or Krishna, station (R., D.B.)** (see p. 458).

ROUTE 30.

GADAG JUNCTION to HOSPET (for Hampi and Vijayanagar), Bellary, and Guntakal Junction, and from Guntakal Junction to

- (a) Kurnool (*via* Dronachellam) Nandyal, Guntur, and Bezwada; and
- (b) Dharmavaram and Bangalore.

Gadag junction station (R., D.B.) (p. 503).

53 m. **Hospet station (R., D.B.).** From this point *Hampi* (9. m.) and *Vijayanagar* can most conveniently be visited. The station-master will arrange for a country cart—the only local means of conveyance.

Excursion to Vijayanagar (City of Victory) and Hampi. *

Hampi is the site of the ancient capital of the Vijayanagar Kings, who dominated S. India from 1336 to 1565 A.D., the date of the Battle of Talikota; even after 1565 they continued to rule, though nominally. Vijayanagar continued to be the capital till at least 1570 A.D. The ruins cover

9 sq. m., including *Kamalapur* on the S. and *Anagundi*, the latter seat of the dynasty, N. of the Tungabhadra. Mr R. Sewell's *A Forgotten Empire* deals fully with them.

The Kamalapur D.B. is 7 m. N.E. from Hospet; it is an old temple converted into a rough D.B. The Hospet - Kamalapur road might be better maintained. There is a good road from Kamalapur to Hampi, which winds round the rocky hills between which the old city was built. The site is watered by a channel from the river. The distance between Kamalapur and Hampi has been described as "virtually a vast open-air museum of Hindu monuments in the Dravidian style of architecture." Outside the inner fort, or citadel, there are a number of important structures in ruins; within the citadel remains of Palaces, pavilions, temples, and many other structures still exist in great profusion.

Hampi was founded on the fall of the Hoysala Ballala dynasty (p. 525), about 1336 A.D., by two brothers, Bukka and Harihara, who had been driven out of Warangal. Their descendants flourished here till the Battle of Talikota (1565), and afterwards at Penugonda, Vellore, Chandragiri, and Chingleput (as some writers say) for another century, until finally overwhelmed by the advancing Muhammadan powers of Bijapur and Golconda. During the two and a quarter centuries that the Vijayanagar Rajas held the city of Hampi they extended it and beautified it with Palaces and temples.

The traveller Cæsar Frederick, who saw "Bezenagar" soon after its fall, describes it as being 24 m. round, enclosing several hills. The ordinary dwellings were mean buildings with earthen walls, but the three Palaces and the pagodas were all built of fine marble.

The rout of the Hindu forces at

Talikota was so complete, and the dismay caused by the death of the old King Rama Raja was so great, that no attempt was made to defend the city, which was completely gutted by the Muhammadan conquerors. Colonel Briggs states that for two centuries afterwards the head of the Hindu Prince used to be annually exhibited at Ahmadnagar.

The main portion of the city was enclosed by walls forming a semicircle on the S. bank of the river; in the middle of this was the inner walled citadel and Palace and on the N. bank of the river was another large fortified area by the suburbs of Anagundi; further outer lines of fortifications enclosed the city on the S. side.

Proceeding N. for $\frac{1}{4}$ m. from the D.B., the first remarkable building is the King's or Ladies' Bath, forming a portion of the King's Palace. It is a rectangular structure, with a *haus*, or reservoir, in the centre, 50 ft. square and 6 ft. deep, in which fountains played; but there is no water now, and the whole has been a good deal injured. N.W. of the entrance are remains of the granite aqueduct which was carried from near the throne to the bath. The corridor of the bath, supported by twenty pillars, has an arched ceiling, richly carved with flowers. On either side is a projecting gallery ornamented with carving. Slightly to the W. of the bath and aqueduct is a fine tank, and N. of these is the structure called the Arena, or the Sinhasan, the King's Throne. It consists of a succession of granite platforms 31 ft. high, the outer walls of which are carved in relief with representations of elephants, dancing-girls, hunting-scenes from the *Ramayana*, and camels, well executed. W. of the throne is an underground labyrinth, used probably as a cool retreat in the summer, and N. of the former are a remarkable stone trough and the ruins of a fine bazar. The

stones, forming the trough measure about 11 ft. by 6 ft., and the supports are 5 ft. 8 in. high. N. of this again is the temple of Ramachandra-swami, with pillars handsomely carved in relief with figures. The quadrangle inside measurement is 110 ft. from N. to S. and 200 ft. from E. to W. The temple has a vestibule carried on twelve pillars. The adytum is supported by black pillars most elaborately carved. On the plinth of the left gateway is a very long inscription in Old Kanarese. The stones of which this temple is built average 7 ft. 7 in. long and 2 ft. 6 in. deep.

To the E. of this group of buildings in the S.W. corner of the citadel, and across the road leading through the citadel to the N., are the ruins of three temples, one situated on the top of a small hill; while at a distance of $\frac{1}{4}$ m. to the N.E. of it are situated the Zenana, the Elephant Stables, and the Riding School. The first is an enclosure of walls 40 ft. high, with the building called the Zenana Palace in the N.W. corner, and the pavilion, figured in Fergusson's *Indian Architecture* (I, 417), and commonly called the Council Room, towards the S.E. corner. At various corners of the walls are similar small pavilions; in the N. wall is a large tower, and in the W. wall is a fine gateway closed over by projecting stones. The pavilions are too heavy to be really effective, but are picturesque in their present state of ruin; the painted decoration of the upper rooms of the main pavilion is still visible. To the E. of the enclosure is a smaller *sinhasan*, or throne, and the fine range of Elephant Stables divided into eleven domed compartments, some of which were elaborately decorated inside. Along the front of the building is a broad drip-stone carried by brackets. The so-called Riding School or Concert Hall stands at right angles

to the stables on the N. side of the Zenana; the purpose which this building really served is uncertain. To the S.E. of the Zenana is another temple, and between it and the three temples above mentioned is an interesting rock excavation, one of the chambers of which has a drip-stone carved on it.

Returning W., and passing outside the citadel on the N.W. side, where the gateway figured in Fergusson's *Indian Architecture* stands, and crossing the remains of a fine bazar, the next group of buildings of interest is reached on the S. side of the hill which dominates the village of Hampi. The first of these, on the left of the road, is a gigantic image of the Narsingh Avatar, carved out of a single block of granite, in an enclosure of ponderous granite blocks. The figure is that of a colossal lion-headed man with enormous projecting circular eyes and a huge mouth; it is seated, and has its legs and arms broken. A spirited carving of the Shesh Nag forms the canopy of the idol. The monolithic uprights at the door are 18 ft. 8 in. high out of the ground. Just outside the gate is an upright stone with a Kanarese inscription on both sides. A few yards N. of this enclosure is a small temple containing a huge Lingam and Yoni, the largest representation of these objects of worship existing.

N.E. is a vast temple to Krishna-swami, enclosed by a granite wall. The breadth of the chief court is 200 ft. from N. to S., and the length 320 ft. from E. to W. At the gopuram which forms the entrance is a stone 8 ft. high, with a Kanarese inscription on both sides. There is also on the columns of the gopuram an inscription in Nagri and Kanarese. The carving of the various portions of the temple is noticeable, and the whole enclosure is extremely picturesque. N. of this

temple, about 50 yds. off the road, is a temple with a huge Ganesh 10 ft. high; and a few yards farther another, vastly solid, built of granite, dedicated to Ganesh, in which the idol is 18 ft. high. The size of the enormous granite slabs which form the roof is remarkable. After passing this temple the precincts of what is now called *Hampi* are entered, and *Langur* monkeys may be seen in considerable numbers. A road-way, at a moderate incline, has been substituted for the old steps, so that it is now possible to drive into Hampi. After passing on the left a square building, which may have been a *math*, and some gigantic trees, the portal of the great temple of Hampi, which is sacred to Siva, under the name of Pampapati Swami, is reached. The gopuram at the N. entrance is truly gigantic, and taken in all its dimensions is (being over 165 ft. high) perhaps one of the largest in India. The length of the first quadrangle from E. to W. is 208 ft., and its breadth from N. to S. 134 ft. The second quadrangle is smaller, and has arcades all round built of granite. Europeans must not enter the second inner quadrangle, unless permitted to do so by the temple authorities. But there is no need to do so, as the temple differs in nothing from the ordinary type which can be visited anywhere.

At the E. end of the grassy avenue in front of the temple is another large temple, picturesquely situated on a ridge, and approached by a long flight of steps with pavilions. The road turns N. from here and leads to the river, which makes a sudden bend at this point, and after passing a temple of Ramaswami (Ramchandra) with a stone lamp-stand in front of it, and the ruins of the old bridge, reaches at a distance of $\frac{1}{2}$ m. the temple of *Withoba*, or Vijaya Vitalaswami, also figured in Fergusson (I, 403).

In front of this is a stone-weighting frame, and at the S. end of it is a stone rath (car) 26 ft. high.

There are three temples in the enclosure, which has four Dravidian gopurams. The second temple, on the left of the entrance, is much the largest and finest. The ceiling was formed of slabs of granite 35 ft. long, but all the slabs have been thrown down except two in the centre. There are fourteen columns, which supported the roof. Most of them are carved into representations of horsemen mounted on *yali* lions. One represents the Narsingh Avatar. In some cases the *yali* is supported by elephants. Within is a court 100 ft. long from E. to W. and 62 ft. broad from N. to S. On the S. side are numerous Kanarese inscriptions. S. of the temple is a large dharmasala with sixty-two pillars, on which are curious reliefs of female monkeys and dwarfs. On the right of the entrance is a platform with thirty-nine shorter pillars. These are also carved with curious representations of monkeys, their heads crowned with two small figures of gods. The third temple is some 20 yds. N. of the car.

An hour or so may well be spent in the solitude of these beautiful ruins. Any one who may wish to ascend the hills above Anagundi, on the left bank of the river, for the sake of a general view over Vijayanagar, can cross the Tungabhadra in a circular basket-boat, such as were used on the Tigris and Euphrates 2500 years ago, and are still so used. The Matanga Temple affords a fine general view of the ruins. The ruins at Hampi have been officially surveyed, and a full account of them is contained in the Report of the Archaeological Department of the Southern Circle, Madras, for 1912-13.

93 m. Bellary station (R., D.B.). —A municipal town and large military station, headquarters of district of same name (population 34,956). A spur from the Sandur range runs along the S. side of the Cantonment, and extends E. to Budihal, 8 m. distant, where it abruptly terminates. A high point in this range opposite the fort is called the *Copper Mountain*, the height being 1600 ft. above the plain and 2800 ft. above the sea. Excavations are still to be seen in it; these are said to be the remains of mines worked by order of Hyder 'Ali, but abandoned in consequence of the expense exceeding the profit. Besides copper, hematitic iron ore is found in large quantities, some possessing magnetic properties.

The *Fort*, built on a bare granite rock of semi-elliptical form, rises abruptly from the plain to the height of 450 ft. The rock is defended by two distinct lines of works, constituting the lower and upper forts, both built of granite. In the upper one stands the citadel, which is reputed to be of great antiquity. Several tanks or cisterns have been hollowed out in the rock, to hold rain-water. The lower fort was built for Tipu Sultan in 1792 by a staff of French engineers, tradition adding that after the new citadel had been completed Tipu Sultan hanged them at the gate, as he found that his fort was commanded by another rock. The place came into the possession of the British in 1800. Besides the ruins at Hampi, there is much to be seen in the Bellary District—viz., the Temple of Bhimeswara at Nilagunda, 8 m. S.W. of Harpanahalli (excellent road for 7 m.); the ruined Harpanahalli Fort; the Kalleswara Temple at Bagali, 4 m. N. of Harpanahalli; a prehistoric mound at Budi-Canive, representing the remains either of those slain in battle or of great

sacrificial holocausts; the Kappagallu, known as "Peacock Hill"; the hill fortress of Ragadrug with its Jain antiquities (rock-cut bas-relief sculptures) and three cells; a very fine well at Tambarahalli; and other objects for which the *Bellary District Gazetteer* should be consulted.

123 m. Guntakal junction station (see p. 477).

(a) Guntakal to Bezwada.

17 m. from Guntakal Tuggali station. Pattikonda (D.B.) (population 5328) is the headquarters of a Tahsildar, and is 7 m. to the N. of Tuggali, connected by road. Sir Thomas Munro, Governor of Madras, died here on the 6th June 1827 of cholera, when on tour in the District. To his memory Government constructed a fine cut-stone well with a *mandapam*, or porch, and planted a grove of tamarind-trees around it. A new town called Munro's Square was built on this occasion, with a rampart wall all round. The wall and gates are still in a state of fair preservation. The Taluk office contains an interesting bas-relief of Munro (which is rapidly crumbling) and a very mediocre replica of the same.

43 m. from Guntakal Dronachellam or Dhone (D.B.) (population 3985) is headquarters of a Deputy-Collector and a Tahsildar.

Peapalli (population 3675) is situated 15 m. from Dhone, on the Gooty road, and 11 m. from Gooty (a railway station on the Madras-Raichur line). It has a D.B. It is a Deputy-Tahsildar's headquarters. It is situated at the foot of a granite hill, and is the most elevated town in the District, being 1750 ft. above the sea-level; considered to be the sanatorium of the District.

Branch Line from Dhone.

A branch line is taken from Dhone northwards as far as Kurnool, which is the headquarters of the District.

13 m. from Dhone Veldurti (D.B.) (population 3446). 5 m. to the W. of Veldurti there is a village called Ramallakota (population 1744), where there are indications of alluvial washings and rock-working for diamonds.

33 m. from Dhone Kurnool (D.B.) (population 25,837). The headquarters of the District, and a municipal town, situated at the junction of the Hindri and the Tungabhadra. The temperature is high in April, May, and June. The old fort was dismantled in 1862. The fort wall along the River Tungabhadra and some of the bastions are still intact. There are two gates leading to the River Tungabhadra. The town still contains the Palace of the Nawabs, which is almost in ruins. There are several mosques and a fine mausoleum of Abdul Wahab, the first Nawab to whom the place was given in *jagir* by the Emperor Aurangzeb. These Pathan Nawabs and those of Cuddapah took a prominent part in the 18th century; they were first absorbed by the Nizam, and afterwards by Hyder 'Ali. In 1838 information reached Government that the last Nawab Ghulam Rasul Khan was engaged in treasonable military preparations on an extensive scale. The town and fort were then captured after a short fight, and the Nawab escaped to Zorahpur, which lies on the S. bank of the Hindri. The name is derived from Zorah, a sister of Abdul Wahab, the first Bijapur Subadar. The Nawab was deposed in 1839. An *anicut* is constructed across Tungabhadra at Sunkesula, a village 17 m. from Kurnool, whence the Kurnool-

Cuddapah Canal traverses the District *via* Nandyal. There are bungalows at convenient stages along the canal, and boats can be obtained between July and December on application to the Executive Engineer at Kurnool. The Government Fisheries Department has opened a fish-breeding farm at Sunkesula.

Guntakal-Bezawada line (contd.).

51 m. from Guntakal **Malkapuram** (population 1924). 7 m. to the S. of this there is a village called Allhiabad, a hamlet of Muni-maduga, where there are diamond mines for which a mining licence has been granted.

66 m. from Guntakal **Betamcherla** (population 3956). Barytes and steatite are found in the neighbouring villages of Muddavaram, Ambapuram, and Balapalapalli. There is a rock fortress which is in ruins. Prospecting for diamonds goes on in the neighbourhood.

81 m. from Guntakal **Panyam** (D.B.) (population 3698) contains a tank round which small-game shooting is fairly plentiful. A road connects it with Banganapalle, which is the chief town of the Native State. There are diamond mines near Banganapalle, for which a mining lease has been granted by the Nawab.

91 m. from Guntakal is the municipal town of **Nandyal** (population 16,230). There is a R.H. close to the railway station, which is sometimes available on previous application to the Superintendent, Agricultural Department, Bellary. The Government Agricultural Farm is close by. There is also a canal bungalow. There are two big tanks separated by a road leading to the canal bungalow. The place takes its name from Nandi,

the bull of Siva, to whom a temple is dedicated. There are three cotton presses and two ginning factories. There are several mission buildings.

Before reaching Nandyal the line passes through the Yerramalai Hills, and, after passing it, through the Nallamalai Hills, by many picturesque curves.

100 m. from Guntakal **Gazulapalli** (population 840). There is a forest R.H. Big-game shooting can be obtained in the Nallamalais on licence granted by application to the District Forest Officer, South Kurnool. Mahanandi, a place of pilgrimage with a temple and a perennial spring, 5 m. distant, deserves a visit.

133 m. from Guntakal **Giddalore** (population 3737). A P.W.D. R.H. and forest R.H. It is the headquarters of the Tahsildar and an S.P.G. missionary.

154 m. from Guntakal, **Cumbum** (population 6344). This contains a beautiful tank, which was constructed by damming by a bund 57 ft. high a gorge between two hills by Varadarajamma, wife of Krishna Devarayadu, a King of Vijayanagar. It irrigates 6000 acres. There is a P.W.D. R.H. on the tank bund.

259 m. from Guntakal is **Guntur** station (R.: D.B.). It was important in the 18th century as a capital of the 4 N. Circars (Sirkars) held in *jagir* by Basalat Jang, brother of Nizam 'Ali, after the others were ceded to the E.I. Co. Many old French tombs in the cemetery. It is now an important American Mission centre: also an important cotton mart and centre of the tobacco trade: there are several cotton presses. The Amravati Buddhist remains are 22 m. by road from Guntur. The railway crosses the Krishna by a long

bridge (p. 458), just below the irrigation dam, before entering

279 m. *Bezwada* (R.) D.B.

(b) *Guntakal to Bangalore.*

42 m. *Anantapur*, headquarters of a District formed in 1882. There are interesting antiquities at *Penukonda* ("Big Hill"), the residence of the *Vijayanagar* Princes as early as 1354. The King and his court fled there after the disastrous *Battle of Talikota*, 1565. The remains of the citadel of the fort are on the top of the hill, 3000 ft. high. The buildings worth seeing have been described in the Report of the Archaeological Department, Southern Circle, Madras, for 1912-13, already mentioned. In the compound of the Sub-Collector's office is a fine lofty *stambha* or stone pillar, some 40 ft. high and of elegant proportions. At *Anantapur* town there are buildings erected by Sir Thomas Munro soon after 1800, when the Ceded Districts were handed over to the E.I. Company, and Munro was appointed their first Principal Collector. There are his bungalow (now occupied by the Assistant Collector), court-room, and a few old wells. An inscription states that the house was once the residence of Sir Thomas Munro. The court-room is still known as "*Munro Hall*," and has an engraved portrait of Munro. Near *Kalyandrug* town, 36 m. W.S.W. of *Anantapur* and 22 m. from *Rayadrug* railway station, there are innumerable prehistoric remains, cairns, and ruined cell-tombs.

63 m. from *Guntakal* is *Dharmavaram* junction (R.). Branch of the S. Indian Railway to *Pakala* (142 m.). 3½ m. from the *Mulachacheruvu* station (65 m.) is the picturesque *Sompalle Temple*, with a stone car and beautiful monolithic flagstaff 50 ft. high.

112 m. *Hindupur* (R.). The temple here is the special object of pilgrimages.

At *Lepakshi*, 9 m. E. of *Hindupur*, is a large temple to *Virabhadra* (a form of *Śiva*), with a colossal stone bull about 15 ft. high and 27 ft. in length standing near it. The temple is in the *Vijayanagar* style of architecture, and has an inscription ascribing to its building the date 1538 A.D.

151 m. from *Guntakal* is *Dodbellapur*. 12 m. to the E. of this station rises

Nandidrug, a strong hill fort 4851 ft. above sea-level. It was thought impregnable by *Tipu Sultan*, being inaccessible except from the W., and there strongly fortified. It was taken, however, by General *Meadows* on the 19th October 1791, with the loss of only thirty killed and wounded, chiefly by the tremendous masses of granite rolled down the rock on the heads of the assailants. The rock called *Tipu's Drop*, projecting from the fortress, has a precipice of 1000 ft. clear below it.

Nandi is a railway station for visitors to the *Nandidrug Hills*. From the station to the foot of the Hill the distance is about 2½ m.: from a village there, named *Sultanpet*, to the top there is a flight of about 1175 steps: chairs can be obtained for the ascent: there is also a bridle-path. In the hottest months of the year the summit is cooler than *Bangalore*, and the climate is very nearly equal to that of *Coonoor* in the *Nilgiris*, so it is becoming a resort in the hot season for both Europeans and Indians. There are six furnished bungalows on the hill. The Superintendent, Government Gardens, *Lal Bagh*, *Bangalore*, will, on application, arrange for accom-

modation and food. There are sheds for motors at the foot of the hill.

174 m. from Guntakal is Bangalore junction (p. 527).

ROUTE 31.

HUBLI JUNCTION to HARIHAR BIRUR (for Shimoga and the Gersoppa Falls), Banavar (for expedition to the temples at Hallabid and Belur, also to the Hill of Indrabetta, near Sravana Belgola), Arsikere Tumkur, and Bangalore.

Hubli junction station (R.) (p. 504), on the Madras and Southern Mahratta Railway.

81 m. from Hubli junction is Harihar station (R.), on the right bank of the Tungabhadra. In 1868 a very fine bridge was constructed over the river. An inscription on copper has been found here of the 7th century, and there are several of the 12th. The fine temple was erected in 1223. In 1268 additions were made by Soma, the founder of Somnathpur in the Mysore District (p. 530).

124 m. Holalkere. From here the interesting fortified Hill of

Chitaldrug (D.B.), lying 26 m. to the N.E., may be visited. From Hosdurga, 20 m. S. of Holalkere, may be visited the great Marikanve Lake, formed by a dam, 1200 ft. long and 140 ft. high, across the Hagari Valley, and covering 35 sq. m. There is a penstock with a fall of 60 ft. by the dam. This work too was inaugurated by Sir K. Seshadri Iyar (p. 532).

160 m. Birur junction, branch line to (38 m.) Shimoga (D.B.), the headquarters of the N.W. District of the Mysore State. Just before Shimoga is reached the Bhadra River is crossed not very far from its sources.

This is now the most convenient starting-point for the Gersoppa, as they are usually called, or Jog Falls of the Saravati, distant 65 m., the stages, each with a R.H., being Ayanur (15 m.), Anantpur (15 m.), Sagar (15 m.), Talgappe (10 m.), Gersoppa Falls (10 m.). A jatka mail-cart now runs daily to Sagar (special, Rs.8); if application is made beforehand to the Amildar, Sagar, he will be sure to lend courteous assistance to obtain a bullock tonga and arrange for relays of bullocks on to the falls. The charge per pair of bullocks or buffaloes is an.3 per mile. There is now, also a private motor service. Supplies must be taken with one for the journey. The road is pretty and interesting, and passes through much fine bamboo and tree forest. The journey will occupy two full days, as the bullocks cannot go more than 4 m. an hour on an all-round average. Some miles above the falls the road to the Mysore bungalow on the left bank turns down to the Saravati, which is here an extremely beautiful, broad, deep stream flowing between high finely-wooded banks, while the main Honavar road continues directly on to the Bombay

bungalow at Kodkani, on the right bank close to the Raja Fall.

There are in all four falls, which have been called the Raja, the Roarer, the Rocket, and the Dame Blanche. In the first of these the water in considerable volume leaps sheer down a height of 829 ft., measured by line, and falls into a pool 132 ft. deep. The spectator can look right down into this abyss. Viewed from below and at some distance this fall contrasts with magical effect with the next, the *Roaer*, in which the water rushes with less abruptness, foaming down a tortuous channel into a cavern or cup, which turns it into the rift of the Raja below. The name given to the third fall, at a little distance to the S., the *Rocket*, is very appropriate. It continually shoots out in jets of foam, which burst like fire-rockets into showers of glittering drops. The *Dame Blanche*, nearest the S. end of the cliff, is exquisitely beautiful, and streams in a succession of lace-like cascades over the sloping surfaces of the rock wall underneath it. The finest view is no doubt that from the Mysore side (though that from the front of the R.H. on the N. bank is very beautiful also), as from it the black chasm into which the Raja and Roarer leap and pour is fully seen, as well as the curving face of the cliff down which the Rocket and Dame Blanche shoot and stream. A particularly fine view is that from Lady Curzon's seat and Watkin's platform to the W. of the Mysore bungalow; and no one should fail to make the expedition to the foot of the falls, steep though the paths are for returning. A splendid surge of spray constantly rises from the pool into the chasm and the recess of the falls, and in the afternoon is touched with rainbow glories. The whole of the deep recess into which the waters are hurled is covered with fine trees and dense undergrowth (full of

leeches !), and the river disappears to the W. between the dark walls of the gorge through which it hurries to the sea. In its full glory there are few more wonderful effects of nature to be seen anywhere in the world; but it must be remembered that in the dry season the amount of water in the falls becomes very small, and that in the rains the whole of the recess and the falls, or at least the chasm of the Raja, may be shrouded for hours, and perhaps even days, in thick impenetrable mist. The best time for a visit is probably early in the cold weather, as soon as the rains have ceased. The following account of the journey to the falls from Honavar is from the journal of an accomplished writer who visited the place in 1888. The trip from this side involves a journey by steamer to Karwar, a journey by sea-boat of 50 m. to Honavar (the steamers will, however, sometimes stop off this Port), and a journey up the river for 18 m. to 20 m. in a small boat; and for the ordinary traveller the route by Shimoga is now much the more convenient one to take. "Arrangements had been made for our passage to the Gersoppa Falls. We went on the same night 18 m. in boats up the moonlit river, grounded on a sandbank, and were pulled off only to find the rowers had landed to drink success to our future progress, to which this indulgence by no means conduced. Arrived at Gersoppa, we slept in the D.B., awoke to the crowing of the jungle cock, and went on 20 m. by road to *Kodkani*. Here is another D.B., whence you look down into a boiling chaos of waters. The road from Gersoppa to Kodkani is one long bower of evergreen trees, and at mid-day you scarcely see the sun. These jungles abound with tigers, bears, bison, and game of all kinds, large and small."

The Queen of Gersoppa, called

by the Portuguese the *Rainha da Pimenta*, or Pepper Queen, was a great dignitary in the 17th century. Her subjects were chiefly Jains, by whom the nearest village to the falls is at present almost entirely inhabited. Among the ruins of the city are two ordinary Jain temples.

178 m. Banavar station.

The renowned ruins of Hallabid lie 18 m. S.W. from this point by road, past *Jamgal* (12 m.). 10 m. beyond in the same direction is *Belur*. A pleasant round may be continued from Belur to Hasan (22 m.), Chennarayapatnam (18 m.), for Sravana Belgola (8 m.), and from Chennarayapatnam to Arsikere on the railway (32 m.), the whole trip occupying four long days in favourable weather. The Mysore State authorities will arrange for relays of bullocks (see p. 523) on application being made beforehand. A railway between Hasan and Arsikere is under construction.

At Jamgal there is a temple dedicated to Narsingh, and built entirely of *balapam*, or pot-stone. "It is highly ornamented after the Hindu fashion, and on the outside every part of its walls is covered with small images in full relief."

Hallabid¹ (R.H.), named from the Kanarese words *hale*, "old," *bidu*, "ruins," is a village on the site of Dorasamudra, the capital of the Hoysala Ballala Kings. It was founded early in the 12th century, but was rebuilt in the middle of the 13th by Vira Someswara, and some inscriptions represent him to be the founder. Attacked by leprosy, he withdrew to the neighbouring Hill of Pushpagiri ("Mountain of Flowers"), where he was instructed to erect temples to Siva to obtain a cure.

¹ See Fergusson's *Ind. Arch.*, 1, 442.

The Muhammadan General Kafur took the city in 1310, and plundered it of immense wealth. In 1326 another army of Muhammadans carried off what remained and destroyed the city. The Raja then removed to Tonnur.

There are two most remarkable temples remaining. The northernmost of these, the *Ketaresvara*, is the smaller of the two, and was a miracle of art. Unfortunately a tree took root in the vimana, or tower, over the sanctuary, and, dislodging the stones; rendered much of the temple a heap of ruins. The temple was star-shaped, with sixteen points, and had a porch that from base to top "was covered with sculptures of the very best Indian art, and these so arranged as not materially to interfere with the outlines of the building." It was when intact the finest specimen of Indian art in existence.

The second temple, the *Hoysaleswara* ("Lord of the Hoysalas"), is much larger than the *Ketaresvara*. It stands on a terrace, 5 ft. 6 in. in height, paved with large slabs. The temple itself is 160 ft. from N. to S. by 122 ft. from E. to W., and beyond its walls there is a clear margin of platform all round of about 20 ft. The height from the terrace to the cornice is 25 ft. It is a double temple, one half being sacred to Siva, and the other to his wife. Each half has a pavilion in front containing the *Basava*¹ *Nandi*, or bull. The larger of the two is 16 ft. long by 7 ft. broad and 10 ft. high, the animal being represented kneeling.

Some of the pillars in the inner part of the temple are of black hornblende, and have a dazzling polish. Mr Fergusson says: "Some of these friezes are carved

¹ Basava was founder in the 12th century of the Lingayat Saivite sect in S. and W. India. The members, who are vegetarians, admit the equality of women with men, allow widow marriage, and disregard Brahman sanctity.

with a minute elaboration of detail which can only be reproduced by photography, and may probably be considered as one of the most marvellous exhibitions of human labour to be found even in the patient East." He adds: "Here the artistic combination of horizontal with vertical lines, and the play of outline and of light and shade, far surpass anything in Gothic art. The effects are just what the mediæval architects were often aiming at, but which they never attained so perfectly as was done at Hallabid." In the friezes of sculptured animals which surround the building the succession is always the same, the elephants being the lowest, next above them the *shardulas* (or conventional lions), then the horses, then the oxen, then birds. Mr Fergusson places Hallabid Temple and the Parthenon as the two extremes of architectural art, and says (*Ind. Arch.*, 1, 449): "It would be possible to arrange all the buildings of the world between these two extremes, as they tended towards the severe intellectual purity of the one, or the playful exuberant fancy of the other; but perfection, if it existed, would be somewhere near the mean." A whole day may well be devoted to the leisurely study of the wonderful work on these temples, but admiration for them should not cause neglect of the group of extremely beautiful Jain Bastis at the farther end of the village.

Belur (or Baillur) (R.H.) stands on the right bank of the Yagache (population 2630). In the Puranas and old inscriptions it is called Velapura, and is styled the S. Benares. Here is the famous temple of Chenna Kesava, erected and endowed by the Hoysala King, Vishnu Vardhana, on exchanging the Jain faith for that of Vishnu in the beginning of the 12th century. The carving

with which it is decorated rivals in design and finish that of Hallabid, and is the work of the same artist, Jakanacharya. The image of Chenna Kesava is said to have been brought from the Baba Budan Hills, but that of his goddess was left behind, which obliges him to pay her a visit there at stated intervals. The *Great Temple* stands within a high wall which surrounds a court 440 ft. by 360 ft. On the E. front are two fine gopurams. In this court are, besides the *Great Temple*, four or five smaller ones. "The *Great Temple* consists," says Mr Fergusson (*Ind. Arch.*, 1, 439), "of a very solid vimana, with an *antarala*, or porch; and in front of this a porch, or mahamantapam, of the usual star-like form, measuring 90 ft. across. . . . The arrangements of the pillars have much of that pleasing subordination and variety of spacing which is found in those of the Jains; but we miss here the octagonal dome, which gives such poetry and meaning to the arrangements they adopted. Instead of these we have only an exaggerated compartment in the centre, which fits nothing, and, though it does give dignity to the centre, it does it so clumsily as to be almost offensive in an architectural sense." The windows to the porch are twenty-eight, and all different. Some are pierced with star-shaped conventional patterns, and with foliated patterns between. Others are interspersed with mythological figures, as the Varaha Avatar. The base is very richly carved, and is supported on carved elephants. Mr Fergusson says (*Ind. Arch.*, 1, 440): "The amount of labour which each facet of this porch displays is such as never was bestowed on any surface of equal extent in any building in the world; and though the design is not of the highest order of art, it is elegant and

appropriate, and never offends against good taste. The sculptures of the base of the vimana are as elaborate as those of the porch, in some places more so; and the mode in which the undersides of the cornices have been elaborated and adorned is such as is only to be found in temples of this class." The carving at Belur is more graceful and finer than that at Hallabid, and many of the figures on the exterior are extremely beautiful.

188 m. **Arsikere station (R.)**. There is a beautiful temple here, built by Ballala II. in the 12th century A.D. A railway from here to Hasan and thence to Mysore City is under construction.

32 m. S. from this place is the ancient town of *Chennarayapatnam*.¹ The fort was built subsequently, and Hyder 'Ali added the wet moat and traverse gateways.

8 m. S.E. again is **Shravana Belgola**. Bhadra Bahu, a Jain sage who died here in the 4th century B.C., was a *Sruta kevala*, or immediate "hearer," of the six disciples of Mahavira, founder of the Jain sect. The chief attendant of this worthy is said to have been the famous Emperor Chandragupta, or Sandracottus, who abdicated to live the life of a recluse with him. These events are confirmed by inscriptions on the rock of very great antiquity. The grandson of Chandragupta is said to have visited the spot with an army, and from his camp arose the town of Shravana Belgola, or Belgola of the Shravans = Jains. Near the town are two rocky hills—*Indrabetta* and *Chandragiri*. On *Indrabetta*, reached by a steep, narrow flight of steps going straight up the steep slope of the rock, is a colossal statue of Gomata

Raya, 70 ft. 3 in. It is nude, and faces the N. The face has the calm look usual in Buddhist statues. The hair is curled in short spiral ringlets all over the head. From the knees downwards the legs are unnaturally short; the feet rest on a lotus. Ant-hills rise on either side, with a creeping plant springing from them which twines round the thighs and arms. These symbolise the deep abstraction of the sage, which allows ants to build and the plants to climb around him unnoticed. Though certainly 1000 years old, and probably 2000, the stone looks as fresh as if newly quarried: its preservation is due to its being profusely anointed at intervals of 25 years. Within the enclosure are 72 small statues, of like appearance, in compartments. An inscription on the front of the colossus states that it was erected by Chamunda Raya, who is said to have lived 60 B.C. The most interesting inscriptions are cut in the face of the rock at *Indrabetta* in ancient characters 1 ft. long. On *Chandragiri* there are fifteen Jain temples, making clusters of the kind known as Bastis, and a number of stone lamp shafts—see 2, 74 of Fergusson's *Indian Architecture*.

248 m. **Tumkur station (R.)** (population 6039). Glass bangles, arms, and cutlery are produced here.

291 m. **BANGALORE City** junction station (altitude 4000 ft., lat. 12° 57', long. 77° 37'; population 88,651). The railway runs on S.W. to Mysore, N. to Guntakal, and E. to Jalarpur for Madras. The Cantonment station lies 2 m. N.E. of the city station. The name is literally "the town of bengalu," a kind of bean. The Cantonment area assigned to the British Government when the

¹ The temple was erected in 1600.

¹ Another name of Gotama Swami. See p. lxxvii.

State of Mysore was restored to its Indian Prince is 13½ sq. m. This State, which is the third largest in all India, comprises an area of 29,474 sq. m., and contains a population of 5,806,193. The present Chief is Col. H.H. Maharaja Sri Sir Krishnaraja Wadiyar Bahadur, G.C.S.I. The ruling family was established as such early in the 15th century, was ousted by Hyder 'Ali, and was restored in the person of the grandson of the deposed Prince, a child of five years of age, in 1799 A.D. The conduct of this Chief, Krishna Raja Wadiyar, and the mismanagement of the State, led to the assumption of the administration by the British Government in 1831, under treaty stipulation of 1799. Various applications of the Maharaja for the restoration of powers to him were rejected; but in 1866 it was decided to recognise his adoption as a son of Chama Rajendra, and that the State should be restored to this Chief should he prove fit. Maharaja Krishna Raja Wadiyar died in 1868, and in 1881 the rendition of the State to Maharaja Chama Rajendra Wadiyar was carried out. The late Maharaja proved an excellent ruler, and died prematurely in 1894. During the minority of her son, till August 1902, Her Highness the Maharani Regent, C.I., carried on the administration with a Council of Regency, Sir K. Seshadri Iyar being Diwan. The late Diwan, Sir Krishna Murti, K.C.I.E., was descended from Diwan Purnaya, the famous Prime Minister of Mysore, a Maharratta Brahman who served alike Hyder 'Ali, Tipu Sultan, and the British Government. The present Diwan is Sir M. Visvesvaraya, K.C.I.E.

The Cantonment (the largest in the S. of India—population 100,834) and City of Bangalore (population 88,651) stretch from the Maharaja's Palace on the N., 6500 yds., to the Koramangala

Tank on the S., and an equal distance from the *Petta* on the W. to the Sappers' Practice-ground on the E. Bangalore proper lies S. of the Dharmambudhi and Sampangi Tanks, which lie in the N.W. and E. corners of the *Petta*, or towf. Beginning with the Cantonment, and taking the noticeable things in order from N.W. to S.E., the first building is the handsome Maharaja's Palace. 2 m. N. of the Palace is the Science Institute, founded by the munificent liberality of the well-known Tata family of Parsi merchant Princes, which bids fair to attain to a world-wide reputation. The gift to the Institute has been no less than 30 lakhs. S.E. of this 850 yds. is the railway station, and 300 yds. S. of that again is *Miller's Tank*, which communicates by a small stream with the much larger *Ulsoor Tank* on the E. edge of the Cantonment. Along the N. side of the Cantonment are the bazars and the pleasant suburbs of *Cleveland Town*, *Richards Town*, and *Fraser Town* (a modern extension) in which are some neat residences and Roman Catholic and Protestant Churches; also a large tobacco factory. The Sappers' quarters are at the E. corner of the bazar adjoining the village and large tank of *Ulsoor*.¹

S. of the Sapper lines are the British Infantry Barracks, and then in order along the N. side of the great Parade-ground, St Andrew's Kirk, built 1864, the Main Guard, the Y.M.C.A., the Bowring Civil Hospital, and the Lady Curzon Women's Hospital. Directly S. of Ulsoor are the Artillery Barracks, and S. again of them the Cavalry Barracks, the old Cemetery, the Mounted Parade, the Artillery Practice-grounds, and the new Army Y.M.C.A. buildings, the foundation-stone of which was laid by Lord Hardinge.

¹ Morris's Guide to Bangalore can be recommended.

N.W. of the Artillery Barracks is *Trinity Church*, which contains a half-length statue in white marble, by MacDowell, R.A., to General Clement Hill, who served through the Peninsular campaigns under his brother Lord Hill, and when commanding the Mysore Division died on the 20th of January 1845 while on a pleasure trip to the Falls of Gersoppa. W. of *Trinity Church* are the *Wesleyan Chapel*, the Public Offices, which include the offices of the Collector and District Magistrate, the Resident's Treasury, etc., the *Mayo Hall*, which contains the municipal office and the *Gymkhana*, standing in the General Parade-ground, which is more than 1 m. long from E. to W. A little S. of its centre are the St Joseph's College and the Bank of Madras, and S.E. of that again the *Roman Catholic Cathedral* and *All Saints' Church*.

S. of the W. end of the Grand Parade-ground is the *St Mark's Church*, in which is a tablet to Lieut.-Col. Sir Walter Scott of Abbotsford, who died at sea in 1847, aged forty-six. To the W. of this is the *Cubbon Park*, the fashionable afternoon resort. In this are the Museum, and the Sir Seshadri Memorial Hall, where the Mysore Government Public Library is located. In the vestibule are a slab with twelve Persian distiches, brought from Tipu's Palace in the fort, a figure of a Jain deity with very superb carving round it. In the large room adjoining there is a valuable collection of geological specimens. Upstairs are stuffed animals, butterflies, and native ornaments and dresses, and a most remarkable collection of fishes. N.E. of the Museum is the Memorial Statue of the Queen Empress, unveiled by King George, then Prince of Wales, on 5th February 1906, and W. is a fine building 525 ft. long from N.E. to S.W., which contains the *Public Offices*,

and in front of them a good statue of General Mark Cubbon, Commissioner of Mysore. The *Residency* is about $\frac{1}{4}$ m. N. of the Public Offices. To the E. of it are the Post Office and the new Telegraph Office, which were built recently.

The city of Bangalore proper has an area of only 9.76 sq. m. The *Petta*, as it is called, was until recent times surrounded by a deep ditch and thorn hedge. There is an excellent market between the Fort and Mysore Gates. The Brahman quarter is called *Siddi Katte*. The streets are somewhat narrow and irregular, but scattered about there are well-built and imposing mansions belonging to wealthy inhabitants. The grain-market, *Taragu-petta*, and cotton market, *Arale-petta*, present busy scenes of traffic.

The Fort is due S. of the *Petta*. It is 2400 ft. from N. to S. and 1800 ft. from E. to W., and could never have been a strong place against European troops. It is of an oval shape, with one gateway now remaining—the Delhi Gate on the N. face opposite the *Petta*. The Delhi Gate is handsomely built of cut granite. When Lord Cornwallis, on the 21st March 1791, determined to storm the place, there were five powerful cavaliers (Wilks, *Historical Sketches of the S. of India*, 3, 123), a *faussebraye*, ditch, and covered way, but in no part was there a perfect flanking defence. The garrison, however, consisted of 8000 men under Bahadur Khan, and there were besides 2000 regular Infantry in the *Petta* and 5000 irregular. In addition to all, Tipu himself, with an army far superior in numbers to that of Lord Cornwallis, was prepared to take advantage of any error on the part of the besiegers. The *Petta* had been previously taken by the British on the 7th of March, with a loss on their part of 131 killed and wounded, and on the part of the Mysore garrison

of upwards of 2000 men. The assault took place at eleven at night, and until the Kiladar fell a determined resistance was made. Tipu's camp that night was at Jigni, 6 m. to the S.W., and at nightfall he moved up within $1\frac{1}{2}$ m. of the fort; but the spirits of the assailants overcame all difficulties, and the fort was captured, after a severe struggle, in a few hours.

In the centre of the fort is the arsenal, and there are some remains of *Tipu's Palace*. There is a small temple near the Mysore Gate. The ramparts of the walls deserve a visit. Outside the N.W. corner of the fort is the fine Victoria Hospital, maintained by the State. To the W. is the Minto Ophthalmic Hospital.

$1\frac{1}{2}$ m. to the E. of the Petta and fort is the Lalbagh, a most beautiful garden, said to have been laid out in the time of Hyder 'Ali. There is a fine collection of tropical and sub-tropical plants, and a large collection of wild animals in cages.

In consequence of the prevalence of plague in Bangalore several modern extensions, with pretty isolated houses, small and large, have been built by the Mysore Government encouragement to the S.W., S.E., and N.W. of the city—viz., Chamarajapet, Basavangadi, Sankarapuram, and Malaswaran, and are well worth a visit as constituting a new and enlightened departure in India.

ROUTE 32.

BANGALORE to

- (a) Falls of the Cauvery, Seringapatam, and Mysore, and
- (b) Bowringpet (for Kolar Gold Fields), Jalarpat Junction, Vellore, Arcot, Arkonam Junction, Conjeeveram, and Chingleput.

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- (a) The Falls of the Cauvery, Seringapatam, and Mysore.

46 m. S.W. Maddur * station (R.) was formerly an important place, but suffered heavily during the wars with Tipu Sultan. There are two large Vaishnava temples here, sacred to Narasimha Swami and Varada Raja, the "Man-Lion" and the "Boon-giving King." A fine brick bridge with seven arches, built in 1850, spans the Shimsha, on the right bank of which the town is built.

By road 17 m. S. is Malvalli, (D.B.), headquarters of the Taluk of the same name, and a municipal town. The Mysore-Bangalore and Maddur-Sivasamudram roads cross at this place. On the 27th of March 1799 General Harris defeated the army of Tipu Sultan here, with a loss to the enemy of 1000 men. On this occasion the left wing of the British was commanded by Colonel Wellesley, afterwards Duke of Wellington.

12 m. S.W. of Malvalli is the village of Somnathpur,¹ famous for the temple of Prasanna Channa Kesava. It is on the new direct road from Mysore to Sivasamudram, and may be visited *en route* from the old capital to the falls, if arrangements can be

¹ See Fergusson's *Ind. Arch.*, 1, 427.

made for that journey. The temple is an elaborately-carved building, attributed to Jakana-charya, the famous sculptor and architect of the Ballala Kings. Smaller than the temple at Hallabid, it is perhaps more pleasing, as the three pyramidal towers or vimanas over the triple shrine are completely finished. The central shrine is that of Prasanna Channa Kesava, that on the S. is sacred to Gopala, and that on the N. to Janardhana. Round the outer base are carved with much spirit incidents from the *Ramayana*, the *Mahabharata*, and the *Bhagana*. The end of each scene is indicated by a closed door. Around lie seventy-four mutilated statues, which once stood on the basement. There is a fine inscription at the entrance, which declares that the building was completed in 1270 by Soma, a high officer of the Ballala State and a member of the royal family. The vestibule is in ruins, and the images are more or less damaged. There are also the ruins of a large Saiva temple, with inscriptions.

From Malvalli the road leads S. $12\frac{1}{2}$ m. to

30 m. Sivasamudram. 3 m. N. of the Cauvery the road turns off to the E., and conducts to the Cauvery Falls Electric Power Station, beyond the Gangan Chaki Fall. The Cauvery divides into two branches, embracing the Sivasamudram Island, about $\frac{3}{4}$ m. above the point where the main road reaches it. This island is connected with the left shore by an extremely picturesque bridge, built like that of Seringapatam, upon simple uprights of stone, at the farther end of which is situated the little R.H., near a small temple. The bridge was restored by a wealthy Indian a hundred years ago. On the up-stream side of the bridge has been constructed the curved regulator from

which the channel leading to the penstock chamber takes off on the left. From the right bank the main road turns to the S. point of the island, where a similar bridge, known as the Kollegal Bridge, makes connection with the right shore in the Coimbatore District. At this point also is a regulator, by which the whole water of the stream can, if necessary, be diverted into the Western channel.

The river, it should be noted, makes a sharp turn above the head of the island, and flows from S. to N. past it, turning sharp to the E. again at the junction below the Falls. These are known as the Bar Chaki Fall, on the right arm, and the Gangan Chaki, on the left arm; the former is $1\frac{1}{4}$ m. from the R.H., and the latter $2\frac{1}{4}$ m. The beds of both channels have fine trees on the banks and some trees on the various rocky islands in the middle of them, which above the actual Falls are quite large. The sheer height of the Falls is 320 ft., but hardly any one of the many shoots into which they are divided has a clear leap of anything like this distance. They are spread over a considerable face of rock, and in the case of the Gangan Chaki (Western branch) and its Falls, curve round considerably to the left front. Both Falls are exceedingly beautiful when a large mass of water is going over them, and it is difficult to say which excels in picturesqueness. The foot of the Bar Chaki Fall can be reached by a long flight of slippery stone steps. The descent to the Gangan Chaki is possible on the W. bank only. On the E. bank, in front of it, are some Muhammadan shrines. A cloud of spray constantly rises from the pools below them, and at a distance may be observed overhanging the head of the Falls. The ordinary monsoon discharge is 18,000 cubic ft. per second, but the discharge of a

high flood has been known to be 200,000 cubic ft. The power of the Falls is being utilised, as already explained, on the left bank, in front of the Gangan Chaki. The steel pipes, or penstocks, carry the water down a vertical height of 400 ft. to the six generators, which are now (1917) able to deliver no less than 13,213 electric h.p. at the end of the receiving line, 93 m. distant, in the Kolar Gold Fields (p. 536). The whole cost of the scheme has been less than £350,000; it was initiated by Sir Seshadri Iyar, and was designed by Col. de Lotbiniere, R.E., C.I.E., and is one of the most remarkable of modern developments in India.

74 m. French Rocks station, so called from being the place where the French soldiers in the service of Hyder 'Ali and Tipu Sultan were stationed. The name of the place is properly Hirode (population 1922). The fort, 2882 ft. above the sea, is 3 m. N. of the railway station.

77 m. from Bangalore is SERINGAPATAM station, situated inside the fort, which is built at the W. end of an island 3 m. long in the Cauvery River, 2412 ft. above sea-level (population, including the suburb of Ganjam, 7457). The name is derived from a temple of Vishnu Sri Rangam, which is of great celebrity, and of much higher antiquity than the city.

Seringapatam¹ has a bad reputation for fever, and the night should not be passed there. By permission of the Darbar the hot hours of the day can be spent at the Darya Daulat Summer Palace. If the train service is not convenient for going on to Mysore, 9 m. distant, a carriage can be ordered

¹ An excellent account of the place, price one rupee, has been published by the station-master, V. C. Subbaraya Moodeliar, and also by the Rev. E. W. Thompson, Mysore.

from there. In 1133 Ramanujachari, the Vaishnava reformer, took refuge in Mysore from the persecution of the Chola Raja, and converted from the Jain faith Vishnu Vardhana, a famous Raja of the Hoysala Ballala dynasty. The royal convert gave him the province of Ashtagrama, including Seringapatam, over which he appointed officers called Prabhurs and Hebbars. In 1454 the Hebbar Timmana obtained from the Raja of Vijayanagar the government of Seringapatam, with leave to build a fort there. His descendants governed till the Raja of Vijayanagar appointed a viceroy with the title of Sri-Ranga-Raya. The last of these viceroys was Tirumala Raja, who in 1610 surrendered his power to Raja Wadiyar, the rising ruler of Mysore; after which Seringapatam became the capital of the Mysore Rajas, and of Hyder and Tipu, till the fort was stormed twice—viz., in 1792 and 1799—by British armies. After the 4th of May 1799 Mysore became the capital.

The Fort stands at the Western extremity of the island, the northern, the longest, face being just a mile in extent. The breach by which it was stormed on 4th May 1799 lies only a short distance to the S.W. of the railway station, beyond a ruined mosque. Opposite it on the S. shore are two cannons buried in the ground, which mark the spot from which the assaulting column advanced. From this point the route round the W. end of the defences should be followed, as it affords fine views of the defences and of the river. Just across the railway line on the N. side is the dungeon in which the captives from Polilore (see p. 547), including General Baird, were imprisoned. S. of this is the Sri Rangam Temple, and considerably to the E., across the open space which was once

the Parade-ground, is the Gangeswar Temple, with the fragrant storehouse of State Sandal-wood to the S. of it, occupying the site of Tipu Sultan's Palace. To the N.E. of this is the Water Gate, outside of which is a very picturesque enclosed space between walls with many stone idols and reliefs of serpents under banyan-trees. On the right of this space is the spot where Tipu Sultan fell, and outside it upon the river bank is a bridge over the fort ditch and a fine ghat built in memory of the late Maharaja. S.E. of this point, and facing the Ganjam Gate, is the Ala (High) Masjid, with two lofty minarets, built in a style very different from any known in N. India. Outside, to the N.E. of the Ganjam Gate, is the Darya Daulat Palace, and E. of it, at a distance of nearly 2 m., is the Lalbagh, with the mausoleum of Hyder 'Ali and Tipu Sultan.

The following brief account of the Sieges of Seringapatam will be found interesting. Lord Cornwallis had appeared before the place on 13th May 1791, after the capture of Bangalore, but was compelled by the weather and want of supplies to fall back from it. In February 1792 the attack was made from the N.W. side of the fort from French Rocks, where an army of 19,000 European and 29,000 Indian troops with 400 guns and a large force of Mahratta and Hyderabad Cavalry had been assembled under Lord Cornwallis. In a night attack on 6th February the town and camp on the N. side of the fort were taken, and the British force nearly penetrated into the fort with the fugitives who took refuge in it. Trenches were then opened against the place, and General Abercrombie having arrived with 9000 additional troops from Bombay, Tipu Sultan wisely decided to submit, and did so on 23rd April at the cost of surrendering

a very considerable part of his territories.

The second siege commenced on 17th April and ended on the 4th of May 1799, when Seringapatam was stormed. The forces under General Harris arrived before Seringapatam on 5th April, and were joined by the Bombay troops under General Stuart on the 14th. Outside the fort on the N. and S. of the Cauvery a "bound hedge" enclosed a large space. That on the N. was 1 m. to 1½ m. deep by 3 m. long along the river, and was defended by six redoubts. Here Tipu had placed the camp of his army, consisting of 5000 cavalry and 40,000 to 50,000 infantry. The regular siege commenced on the 17th, and by the 27th the enemy had been driven out of the whole outer line of defence. By the 3rd May a practicable breach had been made in the walls, and this was attacked by a strong force of 4331 men (2494 British and 1887 Indian) under General Baird at 1 o'clock noon on the 4th. For some reason the defenders were taken by surprise, and the troops, having surmounted the outer wall within 7 m. of the commencement of the assault, turned right and left along the deep inner ditch, which some finally managed to pass. Tipu Sultan, who had hurriedly proceeded to the point of the breach, found that these troops were getting between him and the inner defences of the Palace, and therefore fell back along the N. wall, seeking to regain the Palace from that side. In front of the inner wicket gate there he was severely wounded and placed inside a palanquin, but meanwhile the wicket had been seized by the besiegers, and it had become impossible to enter it. As he lay disabled outside it an European soldier attempted to snatch off his jewelled sword-belt, and, being wounded by the Sultan, shot him through the head. His two sons,

who had been hostages with Lord Cornwallis, and his family then surrendered, and next day the eldest son, Fateh Haidar, who was commanding a force outside the fort, surrendered also. The reserve on the occasion of the assault was commanded by Colonel Wellesley, who became Commandant of the place and the troops left in it. The evening after the assault was ushered in by a storm of extraordinary violence. Tipu Sultan was buried next day in the Lalbagh Mausoleum with military honours.

The island is connected with the N. bank of the Cauvery by the Wellesley Bridge, and with the S. bank by the Periapattam Bridge, both carried on stone uprights as at Sivasamudram. Just beyond the latter is a fine canal, and following the left bank of this to the W. a visitor passes along the outer portion occupied by the defenders and taken from them by the British forces in the siege of 1799. Close to the bridge was Wallace's Post, captured on 26th April and held at first with some difficulty. Half a mile from it are the guns opposite the breach, and beyond these again is MacDonald's Post. Just S. of the canal is a very sacred Hindu temple at a Sangam or junction of rivers. The island was evacuated on account of its unhealthiness in 1811. On it in the following year died the Diwan Purnaya, the famous Prime Minister, who served with equal loyalty Hyder 'Ali, Tipu Sultan, and the British.

The Darya Daulat Bagh, a Summer Palace of Tipu Sultan just outside the E. side of the fort, is distinguished for its graceful proportions and the arabesque work in rich colours which covers it. The W. wall is painted with a representation of the victory of Hyder 'Ali over Colonel Baillie at Polilore, near Conjeeveram (see

p. 547). It had been defaced prior to the siege of 1799, but the Duke of Wellington, then Colonel Arthur Wellesley, who made this garden his residence, had it restored. It was afterwards whitewashed and almost obliterated, but Lord Dalhousie, having visited the spot during his tour in Mysore, ordered it to be repainted by an Indian artist who remembered the original. The perspective is very bad and the general effect grotesque, but the painter has succeeded in caricaturing the expression and attitude of the British soldiers, and the Frenchmen are very lifelike.

The Lalbagh is a garden 2 m. E. of the fort on the other side of the Ganjam suburb, which intervenes between it and the Darya Daulat. It contains the mausoleum of Hyder 'Ali and Tipu Sultan, a square building surmounted by a dome, with minarets at the angles, and surrounded by a corridor which is supported by pillars of black hornblende, a stone that is remarkable for its beautiful polish. The double doors, inlaid with ivory, were given by Lord Dalhousie. Each of the tombs is covered with a crimson pall. The whole is kept up by the Mysore State. The tablet on Tipu's tomb is in verse to this effect—"The light of Islam and the faith left the world: Tipu became a martyr for the faith of Muhammad: The sword was lost and the son of Hyder fell a noble martyr." The inscription gives the date 1213 A.H. = 1799 A.D. In front of the Lalbagh is a simple memorial to Colonel Baillie, who died in 1782, a prisoner of Tipu Sultan. On the way to the garden, on rising ground near the road, are interesting memorials of the officers and men of the 12th and 74th Regiments killed in action in 1799.

86 m. from Bangalore is **MYSORE** station * (D.B. on N. side of town), the old capital of the State (population 71,306), situated at the N.W. base of Chamundi Hill, an isolated peak rising to 3489 ft. above the sea. The city is built in a valley formed by two ridges running N. and S. The streets are broad and regular, and there are many substantial houses two or three storeys high, with terraced roofs. The town has a neat and thriving look, and the sanitation has been much attended to by the municipality. The Mary Holdsworth Hospital is a fine building. To the E. lies the Summer Palace; to the W. are the Public Offices, the fine College, with a statue of Sir James D. Gordon, and a new quarter similar to those at Bangalore. S. of the town is the fort, a quadrangular, moated enclosure of some 450 yds.; in front of it lies the Curzon Park. The foundation-stone of the Chhama Rajendra Institute was laid by King George, then Prince of Wales, on 30th January 1906.

The *Maharaja's Palace* in the fort faces due E., and is built in the ultra-Hindu style. The front is supported by four fantastically-carved wooden pillars. The Sajje or Dasahara Hall is an open gallery where the Maharaja shows himself to the people, seated on his throne, on great occasions. The throne is very remarkable. According to one account, it was presented to the ambassadors of Chikka Deva Raja in 1699 by the Emperor Aurangzeb (Wilks, 1, 106) for their Prince. The Palace legend at Mysore is that it was originally the throne of the Pandus, and was found buried at Penikonda by the founders of the Vijayanagar Empire, Hakka or Harihara and Bukka, who were told where it was by an ascetic. It is at all events, certain that it was used by Chikka Deva and his successors up to the time of

Tipu Sultan, that it was found in a lumber-room when Seringapatam was taken by the British, and that it was employed at the coronation of the Raja to whom they conceded the government. It was originally of fig-wood overlaid with ivory, but after the restoration of the Raja the ivory was plated with gold and silver carved with Hindu mythological figures. The Palace has undergone a thorough renovation, in which wood-carving and stone-carving in local porphyry form a prominent part, and is one of the finest Indian buildings in India.

Chamundi, the hill which overlooks Mysore, is 2 m. S.E. of the fort. It is precipitous, and rises to 3489 ft. above sea-level; a fine path $5\frac{1}{2}$ m. long leads to the top, on which is a temple. Human sacrifices were offered here until the time of Hyder 'Ali. Two-thirds of the way up is a colossal figure of Nandi, the sacred bull of Siva, 16 ft. high, hewn out of the solid rock—a well-executed work of the date of 1659 A.D. Chamundi is a title of the goddess Kali (see p. 107). About 10 m. from Mysore is the Krishnaraja Sagar, a large reservoir formed by a dam across the Kaveri and constructed to store water for irrigation purposes, and to maintain a continuous flow of water at Sivasmudram for generating electric power.

102 m. Nanjangud, 12 m. to the S., possesses a temple 385 ft. long by 160 ft. broad, supported by 147 columns. It is one of the most sacred in Mysore, and enjoys a Government grant of Rs. 20,197. There is a celebrated car-festival here in March, which lasts three days, and is resorted to by thousands.

Coorg, of which the capital town, **Mercara**, lies 75 m. W. of Mysore, is reached by a motor service in

about 6 hours. At Hunsur (27 m., R.H.) are the headquarters of the breeding establishment of the famous Mysore bullocks. Near Fraserpet the N. branch of the Cauvery is crossed. Mercara has an old fort, which underwent a famous siege by the Raja of Coorg in 1791. The country, which had been overrun by Hyder 'Ali in 1773, was cruelly ravaged by Tipu Sultan in 1782 and 1785, and was resumed in 1834 at the request of the people. A Commissioner now administers the country (of which the Resident of Mysore is Chief Commissioner), and has one Assistant under him. As far as possible the Administration is on the old Indian lines. The area under coffee in Coorg is 43,636 acres.

(b) Bangalore City to Jalarpat Junction, Arkonam Junction, and Chingleput.

44 m. from Bangalore city is **Bowringpet** junction for the Kolar Gold Fields Railway (10 m.), and for the Kolar District Railway. The Gold Field (population 48,635) begins 8 m. from Bowringpet, and extends for several miles, presenting a very busy appearance with its numerous tall chimneys, mills, shaft-heads, buildings, and bungalows of all kinds. There are eight Companies¹ at work on the Field, employing over 25,000 people, including 900 Anglo-Indians and Europeans. Since mining on modern principles was begun on the Field in 1883, the mines have yielded gold to the value of £33,000,000 sterling, and have paid dividends amounting to over £13,600,000. In June 1902 they were furnished with 4000 h.p. for mining purposes by the Cauvery Falls Power Works, and this power has since been increased to 9300 h.p.

¹ The principal mines are at present the Mysore, Champion Reef, Oregum, Nandidrug, and Balaghat. Nearly £500,000 are paid away yearly in wages.

87 m. **Jalarpat** junction of Madras Railway (p. 559).

139 m. from Bangalore is **Katpadi** station (R.).

From here a branch of the S. Indian Railway runs (1) S. past Vellore (6 m.) to (100 m.) Villupuram junction for Pondicherry (p. 575); and (2) N. to (20 m.) Chittoor, Pakala, Tirupati (64 m.), and Renigunta (71 m.) (p. 478). At Chittoor (population 15,108), now the headquarters of the Chittoor District, Hyder 'Ali died in December 1782.

Vellore, the headquarters of the N. Arcot District (population 49,746), is 4 m. S. of the railway station, on the opposite bank of the Palar River, which is spanned by a fine brick bridge. Jhatkas always meet the train.

The Fort of Vellore dates from the end of the 11th century. It was occupied by Narsingh Raja of Vijayanagar about 1500 A.D., and was the capital of Murtaza Ali.

The remarkable temple here is sacred to Jalagandar Iswara, "the god that dwells in water"—i.e., Siva. There are two dwar-pals at the entrance of the gopuram of blue granite. The door is very handsome, of wood studded with bosses of iron like lotus flowers. The entrance under the gopuram is lined with pilasters ornamented with circular medallions containing groups of figures; the gopuram has seven storeys, and is 100 ft. high. On the left of the gopuram inside is a stone pavilion, called the *Kalyan Mandapam*, exquisitely carved. On either side of the steps ascending to the mandapam are pillars, which are monoliths, carved to represent various animals and monsters, one above another, in a way which shows prodigious labour and great skill. In the portico or ante-chamber is a wonderfully-carved ceiling, with a centre-piece repre-

sent a fruit, round which parrots are clustered in a circle, hanging by their claws with their heads down towards the fruit; the several richly-carved pillars of the interior are all different from each other. Mr Fergusson says,¹ "The great cornice with its double flexures and its little trellis-work of supports is not only very elegant in form, but one of those marvels of patient industry such as are to be found hardly anywhere else. . . . The traditions of the place assign the erection of the Vellore porch to the year 1350, and, though this is perhaps being too precise, it is not far from the truth." A corridor runs round the enclosure, supported by ninety-one pillars, all with carvings on them. There is a plain mandapam at each corner of the enclosure, corresponding to the Kalyan mandapam. The inner temple is a dark, low building opposite the gopuram; it is entered from the N. side.

The Vellore Mutiny in 1806 (p. cxlvi) was due partly to certain grievances of the native soldiers then stationed there, and partly to the intrigues of the members of the family of Tipu Sultan, then confined in the fort. The garrison consisted of 380 British soldiers of the 69th Regiment and 1500 sepoys. On the morning of 17th July the latter, led by the Indian officers, shot down the British officers as they issued from their residences, and penned the men of the 69th in their barracks, where 82 were killed and 91 wounded. Headed, however, by some officers who forced their way to them, they held their own until Colonel Gillespie galloped up from Arcot with a squadron of the 19th Dragoons and a troop of the 7th Indian Cavalry. The mutineers were then attacked, and 350 of them killed.² The

numbers of the two regiments which mutinied (the 1st battalion of the 1st Indian Infantry and 2nd battalion of the 23rd Indian Infantry) were removed from the Army list. Wazir Ali, the deposed Nawab Wazir of Oudh, who caused Mr Cherry to be murdered at Benares in 1799 (p. 63), died at Vellore in 1817 after eighteen years' captivity in that place and Fort William.

In the old cemetery to the right of the entrance to the fort is a walled-in enclosure with a low sarcophagus inscribed to the memory of Lieutenants Popham and Eley and 80 soldiers of the 69th Regiment, who fell during the mutiny of 1806.

$\frac{1}{2}$ m. to the W. of the fort are the *Tombs of Tipu Sultan's Family* in a well-kept enclosure. Right of the entrance is the tomb of Padshah Begam, wife of Tipu Sultan, who died in 1834 A.D. The second tomb on the right is that of Aftab Khan, who was second instructor to the ladies. Then comes a handsome tank, with stone embankment and steps. Next are two plain tombs of female attendants, and then a handsome granite pavilion with a massive roof supported by four pillars; inside is a black marble tomb to Mirza Raza, who married one of Tipu Sultan's daughters. At the end of these is the largest building of all—a domed mausoleum, 20 ft. sq., to the memory of Bakhshi Begam, the widow of Hyder 'Ali, who died in 1806 A.D. Left of this is a mosque without any inscription, and beyond it scores of plain gravestones and other tombs of members of Tipu Sultan's family and retinue.

1.54 m. from Jalarpat junction is Walajah Road junction for Ranipet (4 m.) and Arcot (5 m.). The Palar River flows between these two, and is crossed by a stone causeway.

¹ *Ind. Arch.*, 1, 396.

² Twenty more were formally executed in various ways.

Near Arcot (Arkát) a small pagoda is reached and portions of the town wall, which was a massive structure of red brick. It was blown up with gunpowder, but the foundations remain, and huge fragments are seen, solid as rocks. $\frac{1}{4}$ m. farther S.E., along the bank of the Palar, is the Delhi Gate, which is the only one that remains so far uninjured that it is possible to form an idea of what the fortification was. Above the gate is *Clive's Room*. A road from here leads S. into the heart of the old town, and in $\frac{1}{4}$ m. to the *Taluk Cutcherry* — a pretty building erected in 1874. After passing this building and turning E., the broad moat, which surrounded the citadel and is now dry with trees growing in it, is passed. Here are two small tanks, which once had fountains in the centre, and near this is the *Makbara*, or *Tomb of Sa'adatullah Khan*. In the same enclosure is the *Jami Masjid*. The tomb has a stone inserted over the door with an inscription, which says that the Nawab died in 1733 A.D.

W. of the Jami Masjid is the ruined *Palace of the Nawabs of the Carnatic*, on a mound overlooking the large lake called the Nawab's Tank. The walls of the darbar-room are still standing. Opposite is the *Kala Masjid*, or Black Mosque, and near the Palace is the tomb of a Muhammadan ascetic, with a rather handsome dome. To the W. is the mosque of Fakir Muhammad. Near it is a tomb, apparently unfinished, in which was laid the body of the Nizam Nasir Jang, murdered by the Nawab of Cuddapah on 5th December 1750, till its removal to Hyderabad. Just across the road is the tomb of Tipu Auliya, of brick whitewashed. In the W. wall is a stone with an inscription, which says that Sa'adatullah Khan erected this tomb for Tipu, who was a man of God. It was from this

saint that Tipu Sultan got his name.

History.

When Zulfakar Khan, Aurangzeb's General, took Gingee in 1698 A.D., he made Daud Khan Governor of Arcot, under which District Gingee was included, and this officer colonised the place with Muhammadans. Until 1712 the Muhammadan Governors resided at Gingee, when Sa'adatullah Khan, who first took the title of Nawab of the Carnatic, made Arcot his capital. Arcot, however, is chiefly known to us for the glorious capture and defence of it by Captain Clive, who here laid the foundation of his fame. When the French and Chanda Sahib¹ besieged Trichinopoly in 1751, Clive led an expedition against Arcot in order to divert a part of the enemy from the siege. Clive had with him only 200 British, with eight officers, six of whom had never before been in action, together with 300 sepoys and three field-pieces. With this small force he left Madras on the 26th of August, and arrived at Conjeeveram on the 29th. Here he learned that the garrison of Arcot amounted to 1100 men. On the 31st he arrived within 10 m. of Arcot, and marched on through a tremendous storm of thunder, lightning, and rain. The enemy's spies reported the *sang-froid* with which the English advanced in these circumstances, and this made such an impression on the garrison that they abandoned the fort. On the 4th of September Clive marched out against the garrison, which had taken up a position at Timeri, a fort 6 m. S. of Arcot.

¹ Chanda Sahib was Minister of Dost Ali, nephew and successor of Sa'adatullah Khan. He set himself up against Muhammad 'Ali, son and successor of Anwar-ud-din, who was made Nawab of the Carnatic by the Nizam, and who was supported by the English, and subsequently received the title of Walajah from the Emperor of Delhi.

The enemy retreated to the hills, and the English returned to the fort, but marched out again a second time on the 6th, and drove the enemy from a tank near Timeri, where they had ensconced themselves. After ten days the enemy, who by reinforcements had grown to 3000 men, encamped within 3 m. of Arcot, where they were attacked at 2 A.M. on the 14th of September by Clive, and utterly routed. Two 18-pounders despatched from Madras had now nearly reached Clive, who sent out all the men he had, except 30 Europeans and 50 sepoys, to bring them in. During this emergency the enemy attacked the fort, but were signally repulsed. Chanda Sahib now sent 4000 men from Trichinopoly under his son Raja Sahib, who entered the town of Arcot on the 23rd of September. On the 24th Clive sallied from the citadel and fought a desperate battle with Raja Sahib's force. On the 25th Murtaza 'Ali brought 2000 men more from Vellore to join Raja Sahib. Clive's situation now appeared desperate: "The fort was more than 1 m. in circumference" (*Orme*, book 3, p. 198); "the walls were in many places ruinous; the rampart too narrow to admit the firing of artillery; the parapet low and slightly built; several of the towers were decayed, and none of them capable of receiving more than one piece of cannon; the ditch was in most places fordable, in others dry, and in some choked up; there was between the foot of the walls and the ditch a space about 10 ft. broad, intended for a *faussebraye*, but this had no parapet at the scarp of the ditch. The fort had two gates, one to the N.W., the other to the E., both of which were large piles of masonry projecting 40 ft. beyond the walls, and the passage from these gates was, instead of a drawbridge, a large causeway crossing the ditch. The

garrison had from their arrival employed themselves indefatigably to remove and repair as many of these inconveniences and defects as the smallness of their numbers could attend to. They had endeavoured to burn down several of the nearest houses, but without success; for these, having no woodwork in their construction excepting the beams which supported the ceiling, resisted the flames. Of these houses the enemy's infantry took possession, and began to fire upon the ramparts, and wounded several of the garrison before night, when they retired. At midnight Ensign Glass was sent with ten men and some barrels of gunpowder to blow up two of the houses which most annoyed the fort. This party were let down by ropes over the walls, and, entering the houses without being discovered, made the explosion, but with so little skill that it did not produce the intended effect; at their return the rope by which Ensign Glass was getting into the fort broke, and he was by the fall rendered incapable of further duty; so that, at the beginning of the siege, the garrison was deprived of the services of four of the eight officers who set out on the expedition, and the troops fit for duty were diminished to 120 Europeans and 200 sepoys. These were besieged by 150 Europeans, 2000 sepoys, 3000 cavalry, and 500 peons." Lord Macaulay writes of what followed: "During fifty days the siege went on. During fifty days the young captain maintained the defence with a firmness, vigilance, and ability which would have done honour to the oldest marshal in Europe. The breach, however, increased day by day. The garrison began to feel the pressure of hunger. Under such circumstances any troops, so scantily provided with officers, might have been expected to show signs of insubordination; and the danger

was peculiarly great in a force composed of men differing widely from each other in extraction, colour, language, manners, and religion. But the devotion of the little band to its chief surpassed anything that is related of the Tenth Legion of Cæsar or the Old Guard of Napoleon. The sepoys came to Clive, not to complain of their scanty fare, but to propose that all the grain should be given to the Europeans, who required more nourishment than the natives of Asia. The thin gruel, they said, which was strained away from the rice, would suffice for themselves. History contains no more touching instance of military fidelity, or of the influence of a commanding mind."¹

It was now that the gallantry of Clive's defence so impressed the Mahratta leader, Morari Rao, who was at the head of 6000 men, that he declared that he had till then never believed that Englishmen could fight, but, seeing their spirit, was determined to help them, and he put his troops in motion. This alarmed Raja Sahib, and he determined to storm Arcot before succour could arrive. He chose the great day of the Muharram, and Clive, who was exhausted with fatigue, was roused by the shouts of the enemy rushing to the attack, and was instantly at his post. The struggle lasted about an hour; 400 of the assailants were killed, while the garrison lost 4 Europeans killed and 2 sepoys wounded. At 2 A.M. next morning the enemy abandoned their camp, into which the garrison marched and brought off four guns, four mortars, and a large quantity of ammunition. This ended on the 15th November this famous siege, and Clive, being reinforced by Captain Kilpatrick, marched out on the 19th and took the Fort of Timeri, and a few days

after defeated a force of 300 French, 2000 horse, and 2500 sepoys, with four guns, and took Arni, with Raja Sahib's treasure and baggage.

In 1758 M. Lally got possession of the Fort of Arcot by bribing the native commandant; but in 1760 it was recaptured from the French by Colonel Coote. In 1780 Hyder 'Ali, after his victory at Conjeeveram over Colonel Baillie, made himself master of Arcot, and strengthened the fortifications, but Tipu Sultan abandoned it in 1783. Subsequently (1803) it passed into the hands of the British from the Nawabs of the Carnatic.

The line from Arcot to Madras was the first railway in the Presidency, and was opened in 1856.

177 m. from Jalarpat junction is Arkonam junction, 43 m. from Madras (p. 478).

194 m. Conjeeveram (*Kanchipuram*, the Golden City, the Benares of S. India) (population 53,864), on the branch line between Chingleput and Arkonam, about 50 m. S.W. of Madras, is one of the oldest towns of India, and one of its seven sacred places. The trains are very inconvenient. There is a two-roomed travellers' bungalow at Conjeeveram: the furniture, however, is insufficient and arrangements must be made for food. On the other hand, it is a very pleasant day's trip in a motor from Madras to Conjeeveram, thence to Chingleput, and back to Madras. Inscriptions recently deciphered show the town to have occupied a position of considerable influence before the Christian era. In the 5th century B.C. Gautama is said to have converted the people of Kanchipuram and in the 3rd century B.C. Asoka is said to have built many Buddhist topes in the neighbourhood, though none now remain. In the

¹ As a matter of fact the history of the siege contains no such incident at all; the garrison had ample supplies up to the end.

1st century A.D. a powerful race of Kings ruled in the Southern Decan, building forts and Palaces in the basin of the Palar, and carrying on an extensive commerce both with West and East. The Pallava Kings were from the earliest historical times renowned for their learning and skill in war; they bestowed liberal patronage on learning and architectural arts. As the capital city of the Pallavas, Conjeeveram is famous in ancient Indian history. The tourist and antiquarian cannot fail to be struck by the number and beauty of its temples. The larger Dravidian temples (of comparatively recent date) are at the present time the most conspicuous objects; but the special attractions are the Pallava temples, which are among the oldest known examples of S. Indian Hindu architecture.

The most important of the group of *Pallava* structure is the *Kailasanatha* Temple, one of the most remarkable architectural monuments, alike for the extent and beauty of its sculptures; it stands in the fields some distance to the W. of the town. For a S. Indian temple its plan is somewhat peculiar. It is comprised in a large and a small courtyard, with a central group of shrines placed towards the W. extremity of the large one. The central shrine is surmounted by a lofty pyramidal tower. The entrance to the central *vimana* is from the E. and N. At each corner, and on the N., S., and W. sides, is a shrine. Each of these shrines and the porch have a smaller tower, which rises up to and is grouped alongside the greater one. Near the base at each corner and face, between the projecting shrines, a large Nandi (sacred bull) is placed on the ground.

On each side of the large court there is a continuous series of cells, each with a small tower and *sikhara* over it. This peculiarity of the group of cells ranged along

each side of the courtyard has given rise to a belief that this must originally have been a Jain temple; but in the great wealth of sculpture represented there is not a single figure which could be called Jain. These cells were originally occupied, not by devotees, but by *lingas*, each with a separate name and representing a different manifestation of Siva. The inscriptions on the face of each are mostly in an early palaeographical form of *grantha* character. A notable peculiarity is the scrolled foliation attached to letters of these inscriptions. The latter give either the names of the different *lingas* or the titles of Kings who erected the building. The *sikharas* on these cells originally stood with their summits appearing above the wall-head of the court, with elephants and Nandis placed alternately on the wall-head between them. But at the present day the modern owners of the building have blocked up the spaces between these *sikharas* with masonry composed of stone, brickwork, and mud, so that the outside of the court forms a continuous line of dead wall. The superincumbent weight of this additional masonry has caused large gaps and cracks in several parts of the walls on which it is placed. The cell towers show on the inside of the courtyard wall. On the N. and S. sides of this court the cells directly opposite the central *vimanas* are larger than the others, and have higher towers over them.

In front of the large central shrine to the E. is the *mahamandapam*. It originally stood detached from the central shrine, but now it is found joined to the shrine by the *ardhamandapam*.

Between these two mandapams is a perforated stone window. The *mahamandapam* has massive piers, on one of which there is an inscription saying that King Vikramaditya made a grant to

the temple. The piers in the *ardhamandapam* are different. Those in the latter are widely-spaced, slender columns, and are of a later structure, evidently built in the time of the later Vijayanagar Kings.

A wall stands between the large and the small courts, and a small temple stands in a line with the centre of this wall. On either side of this temple there are doors which serve as entrances from the one court to the other. Ranged along the E. face of the small court are eight small shrines, each with a tower over it. These shrines deserve careful study. They closely resemble in design the *raths* of Mamallapuram. The spaces between these are now filled with rubble work, blocking up the sculptured panels on the sides.

To the E. of the temple stands the *nandi mandapam*. The basement only remains. There are four *yali* piers at each corner. It must have had a roof, but now there are no traces of it.

At the E. elevation of the temple there are eight small shrines standing in a row from N. to S. on each side of the E. entrance. Evidently the work is incomplete. Each of these shrines is called a *rath*. That on the extreme left stands completely detached from the rest. It is in shape a square, and has carved figures of Siva and Parvati in a sitting posture on the back. On the exterior wall are the *yalis*, partly carved, each *yali* supporting a pilaster with moulded caps over. On the back and sides are rough blocks and panels. Between these panel spaces and the corner *yalis* are small pilasters.

The small platform in front has *yali* piers, whose capitals only are complete; there are traces of carved floral ornaments on the cornices, and a series of small mouldings with carved projections at intervals; the octagonal-domed

sikhara has carved pedimental ornaments on each side.

The *rath* to the right of the last is more complete, as is evident from the fact that the *yalis* on the piers and the dwarf-pals on each side of the door panels on the exterior of the walls are all carved. Siva is seated under a tree with long, matted hair and a *naga*, or serpent, on his left.

The doorway to the E. court has *yalis* at the corners, pilasters on the angles of the doors, and a cornice over it. Above the cornice is an upright portion of wall rising above the court walls on either side. In the centre of this is a panel with Siva and Parvati and attendants.

Brahma and Vishnu are shown worshipping them. The other *raths* are more or less of the same type. The *yalis* of each of the *raths* differ, some having tusks and twisted trunks. The inscriptions on the granite portion of the *raths*—some in Pallava *grantha* character—also deserve careful study. The panel on the Northern side of the last *rath* has a standing figure of Siva with matted hair, two hands, and a serpent over his shoulder. Over the panelled niche in which the figures stand is a floral pedimental ornament only partly carved. The central portion shows representations of two *yalis* with a drooping floral ornament on each side—a thing very common on most of the niches in the temple.

The sculpture on the back of the successive *raths* should be noticed. Behind the back of the *rath* on the extreme N. is Siva on an elephant, with the death-noose in his left, the trident in his lower right hand, and a *naga* in the lower left, and his right foot uplifted on the elephant's head. He is represented as stripping the elephant's skin, which he waves aloft in his two upper hands.

There is a group of posed female figures on some of the small panels,

and on the back of the sixth *rath* is a chariot drawn by two horses, with the figure of Siva in a boot-conferring attitude.

In the large courtyard there are twenty-two pilasters placed at regular intervals on its N. exterior side. Each pilaster has a *yali*, with rider seated on reverse sides, at each alternate bay.

On the W. exterior side, in the entrance, is a gateway with a small tower. An elephant and *gandharva* are seated on the wall-head, and an upper central panel has Siva seated with his hand across his knees. On this façade of the court wall there are five *yali* pilasters on either side of the central doorway. The S. exterior side is spaced by similar pilasters. *sikhavas*, elephants, and Nandis are exposed to view here.

In the small court on the interior side of the small wall the sculptures are all figures of Siva in different postures. The most noticeable sculpture is that on the large panel to the right. It has a group of twelve sages, evidently listening to the exhortations of Siva, who is seated under a banyan-tree in a panel opposite this one on the S. side wall of the central shrine in this court. On another large panel eleven seated sages are similarly listening to Siva, armed with different symbolical weapons, and seeming to preach war.

The next shrine of this temple to be observed is the small one in the centre of the wall dividing the lesser and larger courts. This is at present known as the *Narada Linga Shrine*. The lower bases have two courses of granite, over them a freestone course; *gandharvas* are sculptured on this third course. They have their hands raised over their heads with the palms of their hands flattened against the moulding above, as if they were intended to be shown as supporting the building.

In the exterior of the porch on

the right side is a row of *hansa*, or sacred swans. The panel opposite the last on the inner side of the porch has a large finely-carved figure of Siva, with matted hair and his right knee bent; he has a richly-carved crown, and ornaments on the neck, arm, and leg. Over his left shoulder is a garland of (apparently) bones. Another has alternate square and round ornaments, on each of which is a sculptured skull. The details of this panel are remarkably striking in the arrangement and execution of the whole design, even the smallest ornaments being clearly and beautifully cut.

The exterior of this shrine is again full of sculptures—all representations of Siva. The features of all these figures have a marked form of countenance. The noses are pointed and flat, and give a curious expression to the face, and it is believed that they represent *kurumbars*, common among some of the tribes in early times in this country.

The *mahamandapam*, in the central portion of the large court, has some strikingly archaic details. It has massive stone piers, with heavy square capitals and inscriptions on them of a later date. The piers are without bases. The capitals are of one design throughout—square with great projection. Several have circular lotus discs carved on the faces of the lower and upper square portions. These were evidently intended to support some great overhead weight. The perforated window which leads into the *mahamandapam* is much older than the building in which it now is, and is of black stone. The perforated work is a series of twisting boughs with openings between partly filled by cross-buds. Over the opening is a triple cornice with horse-shoe-shaped panel; in it is a figure of Siva with eight arms. On the circumference of the panel is a leaf ornament springing from

yalis at the foot. The sculptures at different elevations of the *mandapam* are mostly figures of Parvati in different postures. In the lower right panel of the S. elevation is the figure of Lakshmi seated on a lotus flower, holding lotus buds, conch, and Chakra. In the pier of the minor panels on each side are *chauris*, elephants, *gandharvas*, and attendants. Some of the walls are quite plain, without ornaments of any kind.

Adjoining is the *vimana*, with the principal shrine in the centre. Around the *vimana*, and in the recess formed by the projecting exterior shrines, are a series of Nandis placed on the ground and facing the different quarters. At each of the corners formed by the projecting shrines, and extending around the *vimana*, are series of triple *yalis* and riders, intended to represent a support and guard to the temple. The figures sculptured on the exterior ground storey of the *vimana* are again representations of Siva, Brahma and Vishnu worshipping him, and of Parvati.

The general elevation of the superstructure is a small tower over each of the exterior shrines at the corners and façades. The *sikhharas* over the shrines at the corners are square, and over those on the façades are semi-barrel shaped. Above those on the main tower is a storey with a series of two weather-worn sculptured panels on each face of the central projection, and one at each corner. Over this is a double cornice with small *sikhharas*; the storeys above are successively stepped back, forming a slight platform between each. The tower is capped by an octagonal *sikhara* with small pediment on each front. The whole tower is plastered over, and the plaster faithfully represents the underlying stone work, but the plaster work is much coarser in execution. The stone carvings

are without exception beautifully and minutely chiselled.

The *Vaikunta Perumal Temple* is one of the eighteen important Vishnu temples of Conjeeveram where worship is still conducted. It stands about three furlongs S.W. from the railway station, and almost due E. from the Kailasanatha temple. The most important and interesting feature is the building of the *vimana* tower, which has tiers of three shrines one over the other, with figures of Vishnu in each shrine. The sculptures on the different sides of the *vimana* represent scenes from the Puranas.

There are two covered Prakaras of the shrine, and the courtyard has a covered veranda on the four sides. As usual, the shrine is entered from the E. and through an *ardhamandapam*, with its eight *yali* piers and four pilasters and sculptured panels. On the E. side of the courtyard the *mahamandapam* is entirely roofed over the unfinished gopuram built by the later Vijayanagar Kings.

There are figures on the right and left side of the entrance gopuram, exhibiting the same abundance of detail and sculpture seen in the Kailasanath temple. The design again has been well thought out and systematically expressed in stone to produce an architectural effect.

S.W. from this temple, and at a little distance, stands the *Matangeswara Temple*, right in the midst of fields. Its plan is simple—a small shrine with massive walls and entrance through a pillared porch; there is a similarity between this and the Kailasanath tower.

The tower over the shrine is hollow. It is square and built in three storeys. The pillars at the porch are distinctly of the Pallava type. Each has a lion base, the tail of the lion being curved up the back of the pillar. Over the lion is an ornamental

band with polygonal-sided necking, large projecting capital, and a square abacus over.

The back of the porch has pilasters responding to detached piers with figured panels on each side. The pilasters at the corners have *yalis* and riders. The N. and the E. walls have Saivite figures and sculptured panels between the pilasters.

Of the latter Dravidian temples, the most important is that of *Sri Devaraja Swami* at Little Conjeeveram, about 2 m. from the railway station. The street at the E. extremity of which this temple is situated is one of the features of the town. The tower and the outer high walls enclosing the temple appear quite modern. One of the most ancient at Conjeeveram, the building has been renovated within the last four hundred years, and looks quite modern. The tower is about 100 ft. high, and has seven storeys. It contains no figures or representations of Hindu deities. The original builders apparently intended to build it higher than it is. The tower at the E. extremity of the temple, just opposite the one at the main entrance, is higher than the latter, and evidently more ancient. Until a few centuries ago the E. tower was the front one, the idol of the temple faced E., and the town extended to the E. of the temple in the part now deserted. There are two tanks, adjoining the towers. These are fine structures nearly squared, with sides sloping to the bottom in gradual rows of cut granite steps. The tank at the E. tower is much the older.

Within the first courtyard are the singularly beautiful pavilions; with painted roofs resting on four tall, slender pillars. These are situated in front of the flag-staff and a monolith column of granite intended as a lighting-place. The remarkable *Hall of Pillars*, to the N. of the *manda-*

pams, is one of the beauties of S. India, and deserves careful observation. It is a work of considerable merit; the execution and finish of the sculptures are most attractive. The *mandapam* has often felt the rude shock of wars, and hence the figures are slightly mutilated, apparently by shot and sword. The sacrilege is ascribed to Muhammadan invaders, and to Hyder in particular. The hall has ninety-six pillars, carved at the base into horsemen and hippogriffs. The carvings on the pillars are mainly illustrations of the Avatars of Vishnu and incidents mentioned in the *Ramayana* and *Mahabharata*. There are a few lay-figures of great interest. In the fourth pillar from the W., at the N. extremity, facing the tank, there is a figure of a Rajput warrior with a gun in his hand. At the top of this pillar there is a grotesque figure of the god of death. Each of the corner stones on the roof of the hall is a monolith of great size. Not only are parrots, snakes, etc., sculptured on the top, but a chain is also cut which originally hung down nine feet. The story is told that Hyder wanted to try the strength of his sword and cut them to pieces. The chains are now connected together by iron rings.

Into the second court non-Hindus are not permitted to enter. The vehicles, or *vahanams*, on which the idol is carried in procession on the occasion of the grand festival in May of every year are of great beauty and colossal in appearance. This temple is also famous for its umbrellas. A pair of the largest and the best of these cost Rs. 750. The jewels of this temple are not so valuable as those in Tirupati or Sri Rangam, but the workmanship is of a very superior order. At this temple there is a periodical recitation of the Vedas by the Aiyangar Brahmans of this place.

On the occasion of a grand festival so many as 1000 congregate for its recitation.

About 3 m. from this temple due N.W. is the famous Siva shrine of *Ekambaranaik*, in the larger Conjeeveram. The route between the two towns is studded with a number of important temples—a few dedicated to Vishnu and a large number to Siva. In and around Conjeeveram there are said to be a thousand temples and ten thousand lingams. About 1 m. from the Vishnu Conjeeveram is the magnificently-carved wooden car, very high, with massive wooden wheels. In Hodgsonpet the cloth bazars have the silk-bordered clothes for which Conjeeveram has always been famous. The chief street of Conjeeveram leads to Ekambaraswara Temple, which has a sixteen-pillar *mandapam* in front of it. It is quite a modern structure. To the N. of this *mandapam* is the main tower of the temple—a massive structure 188 ft. high, divided into ten storeys. It was built by Krishna Devaraja of Vijayanagar in 1509. From the topmost storey a grand view is obtainable of the whole town and its surroundings. No two towers of the temple are opposite each other, no two walls of the temple are parallel, and there is hardly a right angle in the place. All these create a picturesque effect seldom surpassed, though they lack considerably in dignity. Through the gateway a large open space is entered, to the left of which is the "Hall of a Thousand Pillars" (really 540); most of the columns are beautifully carved and support richly-decorated friezes. In the centre of the hall are a number of grotesque wooden figures, which are taken out on occasions of processions. Into the interior of the temple none but caste Hindus are allowed to enter. The whole building is being renovated, and the present

builders have left not a vestige of the former building to show that it is an ancient institution. The modern structure has stately halls and imposing corridors, well ventilated.

This temple has often felt the shock of war, and was sometimes used as barracks and hospital. It served as a fort for some years during the Carnatic wars, and was attacked by Hyder. From this building Sir Hector Munro retreated to Chingleput on hearing of Baillie's defeat by Hyder a few miles to the N.W. To the S. of this temple, and on the outskirts of the town, is the Sarvatiratham Tank—the finest of all in Conjeeveram. It is the only tank in the town which has anything like decently clean water. Its four sides are studded with little pagodas. It is greatly frequented by bathers and worshippers.

About five furlongs from this tank is the temple dedicated to *Kamakshi*, the "Loving-eyed" Parvati. The consort of Siva is worshipped in Kasi under the name of the "Broad-eyed," in Madura as the "Fish-eyed," and at Conjeeveram by the name of *Kamakshi*. This ancient temple is believed to contain the *samadhi* of Sri Sankara. About 2 m. from the borders of the town is a famous Jain temple in the village on the bank of a river. Its florid architecture and the sculpture in the cloistered court which surrounds it are worth seeing.

At the Conjeeveram temples, and at nearly all the temples in the Madras Presidency, the jewels of the gods will be shown if desired, and a dance of the temple dancing-girls can be seen.¹ A present is, of course, expected in both instances—Rs. 5 to Rs. 15. 2 m. S. of Conjeeveram is a highly-decorated Jain temple of the Chola era.

¹ Known as *Devadasis*—that is, consecrated to the god.

In 1780, at Polilore, N.W. of Conjeeveram, Colonel Baillie's force was cut to pieces by Hyder 'Ali, and Sir Hector Munro, the victor of Buxar (p. 47), who had

failed to support him, threw his guns and baggage into the temple tank on his retreat to Chingleput.

216 m. Chingleput (p. 572).

ROUTE 33—MADRAS CITY AND ENVIRONS.

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1032 m. Madras—Central Station.

Madras. * — Capital of the Madras Presidency of India. Lat. 13° 4', long. 80° 14' 54" E.

History.

Madras was the site of the earliest important settlement of the original East India Company,

to which Queen Elizabeth granted a charter, and was founded from the station of Armagaum (which lay N. of Pulicat, itself 25 m. N. of Madras), in 1639 by Francis Day, on territory given by the deputy of the Raja of Chandragiri, the last representative of the Vijayanagar Royal family, and confirmed by the Raja six years later by a grant inscribed on a plate of gold. Little could the Muhammadan Kings who drove out the dynasty of Vijayanagar in 1565 have supposed that within sixty-five years a scion of the exiled family would grant territory to another conquering race destined to acquire supremacy over all India. A small Fort was at once erected in the settlement, which was known as Chennapatnam, and a town named the Black Town, now George Town, arose N. of it. In 1683 the settlement was made independent of that of Bantam (founded in 1602), and Mr Aaron Baker was appointed its first President, and by 1667 the population had grown to nearly 30,000. The Madras Municipal Corporation is the oldest Corporation in India. It was constituted on 29th September 1688 under a charter issued under the orders of His Majesty James II. under the East India Company's seal on 30th December 1687. The charter constituted the "Town of Fort St George and all the Territories thereunto belonging, not exceeding the distance of 10 m. from Fort St George to be a Corporation by the name and title of the Mayor, Aldermen, and Burgesses of the Town of Fort St George and City of Madrassapatam." The constitution underwent alteration from time to time, and the last alteration was made by the Madras City Municipal Act, 1904. The principal Governors in the 17th and 18th centuries were Sir William Langhorne (1670 - 8), Elihu Yale (1687-91), Pitt (1730-1735), and Pigot, subsequently

Lord Pigot (1755-63 and 1775), who was deposed by his Council and died in durance; and in the 19th century, Lord Clive, Lord William Bentinck, and Sir Thomas Munro. Warren Hastings was a member of the Madras Council from 1769 to 1772. Its subsequent history till the end of the 19th century has for the most part been part of that of the Fort (p. 550) and the Presidency. The Chamber of Commerce was constituted in 1836. The Municipal Corporation now consists of thirty-six commissioners, of whom twenty are elected under a President appointed by Government, being created in 1904. The population of the city, comprised 518,660 souls, made up of 415,910 Hindus, 59,169 Muhammadans, and 41,812 Christians. The income of the Municipal Corporation is about 28 lakhs per annum. About 620 vessels with a tonnage of one million tons, enter the Port yearly; the Port Trust has an income of £100,000. The value of the exports was, before the War, 4½ millions of pounds, and of the imports 7 millions. A dozen mills employ 19,000 hands. The city has been one of the first in India to introduce electric tramways. The present Governor is the Right Hon. John Baron Pentland of Lyth, P.C., G.C.I.E.

The centre of Madras, for all the purposes of a visitor, is Mount Road, on or near which most of the principal hotels and shops are situated. Half-way between Government House, situated on the Cooum River, at the N.E. end of the road, and St George's Cathedral and the Horticultural Gardens lying at the S.W. end, is the Madras Club, and in front of it a statue of Brigadier-General Neill, C.B., Aide-de-Camp to the Queen, who "fell gloriously at the relief of Lucknow, 25th September 1857, aged 47" (p. 393). Opposite Government House is a statue

of King Edward VII., by Mr G. E. Wade, presented to the city by Lod Krishnadas Balmukandas, and unveiled in 1903.

It is intended that the memorial of the late King-Emperor shall take the form of a Sanatorium and Hospital for consumptive patients, but it is not decided yet where this building should be erected.

Government House (admission usually granted when the Governor is not in residence) has in the breakfast-room a picture of the installation of Nawab Ghulam Muhammad Ghaus Khan, under the Governorship of Lord Elphinstone, with the date 1842. In the drawing-room is a full-length portrait of Lady Munro, by Sir Thomas Lawrence—one of his finest pictures. There are also portraits of the Marchioness of Tweeddale; Lord Clive; Sir Arthur Wellesley, by Hoppner; General Meadows, by Home; and Lord Hobart, by Mr Watts. The *Banqueting Hall*, in a detached building, is a noble room 80 ft. long and 60 ft. broad, and very lofty. The principal entrance is on the N., and is approached by a broad and lofty flight of stone steps. The hall was constructed during Lord Clive's government to commemorate the fall of Seringapatam. Round the walls are large pictures of the Queen-Empress Victoria; George III., taken at the beginning of his reign; a full-length of Sir Thomas Munro, by Shee; Robert, Lord Hobart, 1790-8; Lord Harris; Lord Mornington, afterwards Marquis Wellesley, seated on the terrace of the old Government House in the Fort, with two flags on his left, the British surmounting that of Tipu, and the steeple of old St Mary's Church; Sir C. Trevelyan; General Sir Eyre Coote; Lord Cornwallis; Lord Wm. Bentinck; Lord Napier and Ettrick, K.T., in the robes of a peer; the Marquis of Tweeddale;

Sir M. E. Grant Duff; Lord Connemara, and others. In the lower hall is a portrait of Lord Elphinstone (also Governor of Bombay), and in the antechamber pictures of Colonel Stringer Lawrence and Nawab Muhammad Ali (p. 538). A detailed notice of the pictures has been published by the Military Secretary to a former Governor.

Between Government House and the fort is the *Island* embraced by two branches of the Cooum, and forming a large parade and recreation ground. The Gymkhana Club is a handsome structure in the S.W. corner. On the road to the Fort stands a bronze equestrian *Statue of Sir T. Munro*, by Chantrey, erected by public subscription in 1839 at a cost of £9000. The S. branch of the river is spanned by Government House Bridge, the N. branch by Walajah Bridge.

To the E. of Government House, on the sea-front, are the *Chepauk Park and Buildings*. Of this park, once the property of the Nawabs of the Carnatic, Burke gave a most vivid description in his report to the House of Commons upon the affairs of the East India Company. On the death of the last occupant of the *masnad*, the property escheated to the State. Government has since greatly improved the Palace, and the whole building is now in the Moorish style. The entrance, by the Walajah Road, is through an ornamental gateway with representations in porcelain of the various incarnations of Vishnu, executed by the Madras School of Art. The building is now occupied by the *Board of Revenue Offices*. Attached to it on the S. is the *Civil Engineering College*, and beyond this the Public Works and Survey Offices, the Sanitary Engineer's Office, and the Presidency College, originally organised in 1855, a fine large building in the Italian style, with the Students'

Hostel behind it. E. of the last, on the sea-shore, is the interesting Marine Aquarium, originated by Lord Ampthill and carried out by Mr Edgar Thurston in 1908. It is the only one in India. W. of the last is the Caste and Gosha Hospital (opened in 1886), hidden amongst trees, and beyond it are the fine ground and pavilion of the Madras Cricket Club. N. of the old Palace is the *Senate House*, designed, like many other buildings in Madras, by Mr Chisholm. It was begun in 1874 and completed in 1879, at a cost of Rs.289,000. Close to the S. entrance, facing Chepauk Palace, is the *Jubilee Statue of Queen-Victoria*, a replica of the Boehm statue at Windsor, presented to the city by Raja Gajapati Rao of Vizagapatam, and unveiled on 20th June 1887. S.W. of the Chepauk Palace and S. of Government House is *Triplicane*, a crowded district containing the Palace of the Prince of Arcot.

The fashionable drive and promenade of the *Marina*, which Madras owes to the Right Hon. Sir M. E. Grant Duff, passes the statue on the E. It extends from the Napier Bridge, almost to the Roman Catholic Cathedral of St Thomé. From the end of the Marina Road, Cathedral Road runs nearly due W. about 2 m. to St George's Cathedral, the Marina Road itself turning inland and running to the favourite European suburb known as "the Adyar," the Adyar being the river, along which lie several large country-houses. A great part of these roads is overhung by mighty banyan trees, forming a tunnel of agreeable coolness even when the sun is hot.

The Roman Catholic Cathedral at San Thomé, founded by the Portuguese in 1504, has the reputation of standing over the earthly remains of St Thomas. His tomb is pointed out in a subterraneous

recess covered by an altar. On the E. side of the Cathedral is a pretty Anglican church situated on the top of a sand-dune within a few yards of the sea. This tract and that stretching to the W. of it was once known as Mylapore (p. 557). To the S. of it, and 1 m. below the Cathedral of San Thomé, the Adyar River finds its way into the sea. There is a picturesque temple in Mylapore.

Fort St George, situated on the sea-front N. of the island, contains the European barracks, the Arsenal, St Mary's Church, the Military, and some Government Offices. The E. face of the Fort is separated from the sea only by a broad road and a sandy beach accumulated during the present century. It is straight, but the W. face landward is in the form of a crescent, surrounded by a deep fosse, crossed by draw-bridges. The Fort defences are supported by three detached batteries, one at the Marina, and one at each end of the sea-front of George Town.

The original Fort was founded in 1639—in which year Mr Francis Day obtained the concession of Chennapatnam—was remodelled¹ by Mr Robins, once mathematical professor at Woolwich, and assumed its present shape after the siege by Lally. It had been unsuccessfully attacked by Daud Khan, General of Aurangzeb, in 1702, and by the Mahrattas in 1741; but in 1746 La Bourdonnais held the town to ransom for £400,000, and received in the name of the French King the surrendered keys, which were restored to the English by the Treaty of Aix-la-Chapelle. On 14th December 1758 the French again arrived before the Fort,¹ under the command of M. Lally, but retreated on 16th February 1759 upon the arrival of a British fleet of six

¹ The defence was conducted by Governor Pigot and Colonel Stringer Lawrence.

men-of-war, leaving behind them fifty-two cannon and many of their wounded. This time they made their approach on the N. side, and their principal battery, called Lally's, must have been near where the Christian College House now stands, as it was close to the beach, and about 580 yds. N. of the Fort. Another battery was at the Indian cemetery in George Town, and a third about 400 yds. to the S.W. The fleet arrived not a day too soon, as the enemy had pushed their trenches right up to the N.E. corner of the Fort, and 500 of the 1700 British soldiers had been killed, captured, or wounded. In April 1769, while the forces were far away, Hyder 'Ali made his appearance with his cavalry, and dictated to the Governor the terms on which he would spare the defenceless territory. Again, on 10th August 1780, and once more in January 1792, the garrison were alarmed by the appearance of the Mysore cavalry. Here, in Writer's Buildings, Clive twice snapped a pistol at his own head. From this Fort he marched to his first victories; and from it went the army which, on 4th May 1799, killed Tipu Sultan and captured Seringapatam.

When the Fort is entered from the E. by the Sea Gate, the Secretariat buildings (a fine Council Chamber for the meeting of the enlarged Legislative Council of Fort St George was erected a few years ago behind the Secretariat buildings) will be encountered in the middle of the side, with St Mary's Church to the S. and Cornwallis Square to the W. of them. In the square there was until lately a statue of Lord Cornwallis under a stone canopy, on the pedestal of which is sculptured the surrender of Tipu's two sons in 1792. This statue is by Banks, and was erected in 1800 at the joint expense of the principal inhabitants of Madras. It has lately

been removed to the reading-room of the Connemara Library, attached to the Museum in Pantheon Road.

St Mary's Church,¹ built 1678-1680, was the first English church in India; but was entirely rebuilt in 1759. Lord Pigot, Sir Thomas Munro, Lord Hobart, and other distinguished persons are buried here, and Lord Clive was married here. One piece of the Church plate was presented by Governor Yale, afterwards the great benefactor of Yale College, U.S.A. The most remarkable monument is one reared by the E.I. Company (p. 582) to the famous missionary Schwartz, at one time the intermediary between the British and Hyder 'Ali. He is represented dying on his bed surrounded by a group of friends, with an angel appearing above. In the Church are hung the old colours of the Madras Fusiliers,² now the Royal Dublin Fusiliers, which were with the Regiment at Cawnpore and Lucknow. This was the first European regiment of the E.I. Company, and Lord Clive, Sir John Malcolm, and Sir Barry Close served in it. On the N. side of the Church are a number of tombstones removed from the old cemetery of Madras near the site of the present High Court.

On the W. side of Charles Street, leading to the gate of San Thomé (the S. gate of the Fort), are, pointed out quarters which, according to tradition, were once occupied by Colonel Wellesley (the Duke of Wellington). The office of the Accountant-General, also in this quarter of the Fort, was formerly the Government House.

¹ *Fort St George, Madras*, by Mr S. E. Penny, and the *Vicissitudes of Fort St George*, by Mr D. Leighton, will be found to contain many interesting details regarding this church.

² Col. (B.-Genl.) Neill, C.B., wrote a most interesting history of the Regiment in 1842.

The Arsenal forms a long parallelogram. In the *Museum* on the first floor are four cornets, or flags, belonging to the 1st and 2nd Regiments of Madras Cavalry—old flags taken from the Dutch and French, sewn up in covers, to protect them from the squirrels; a very curious brass mortar from Kurnool, shaped like a tiger sitting with legs planted almost straight out; the colours taken at the capture of Sadras in 1780, and from the French at Pulicat in 1781; the Dutch colours taken at Amboyna in 1810; tiger-headed guns taken at Seringapatam in 1792; the six keys of Pondicherry, taken in 1778; and a projectile, which, issuing from the cannon, opens out like a double-bladed sword.

N. of the Fort, and at the S.E. corner of the city, are the old Lighthouse on the Esplanade, which has been superseded by a tower on the High Court, furnished with the latest improved light apparatus, and the New Buildings of the latter, forming a handsome pile, designed and erected in the Hindu-Saracenic style by Messrs J. Brasington and H. Irwin, C.I.E. They cover an area of 100,000 sq. ft., and were commenced in 1888, and the Law Courts were formally opened in 1892. The arrangement of the interior is good, and the internal decoration of wood-carving and painted glass is well worthy of inspection. In the central vestibule is a fine statue of Sir Muthuswamy Iyer, a former Indian Judge. The Lighthouse tower is 160 ft. high, and the light is visible 20 m. off at sea. Opposite the High Court is the fine Y.M.C.A. building of red sandstone, designed by Mr Harris, Government Architect, and presented by the Hon. W. Wanamaker, formerly Postmaster-General of the United States. W. of the Law Courts is the modern Law College, a fine struc-

ture in similar style, designed by Mr Irwin, C.I.E.; and N. of this, across the Esplanade, are the Fachiappa College and Hall, which owe their erection to Pachiappa Mudelliar, a wealthy and benevolent Hindu gentleman, who, dying a hundred years ago when education was almost unknown in Madras, endowed various religious and scholastic institutions and private charities with no less than a lakh of pagodas. The former was opened in 1842. W. of these, and occupying a long frontage on the Esplanade, are the Madras Christian College Buildings, situated opposite the High Court and to the E. of the Y.M.C.A. buildings. They were erected at a cost of £50,000, and form one of the finest Colleges in India; it was originally founded in 1837. Opposite it is a statue of the Rev. Dr Miller, C.I.E., Principal of the College, erected by his pupils and admirers.

Along the sea-front stretching N. from the Esplanade are the Post Office, the new Bank of the Madras Port and Customs Offices, and various houses of business. W. of these is the thickly-inhabited Indian quarter once known as Black Town, but now as George Town in honour of the visit of King George V. Armenian Street in this, running parallel to the sea-front, contains an old Armenian church and a Roman Catholic cathedral, dating from the beginning of the 18th century; farther to the W. of the Armenian Street lie the Municipal Offices and Popham's Broadway. N. of the city are the Monegar Choultry, a Poorhouse for destitute Indians, and the Leper Asylum; and at the N.W. corner in Wall Tax Street are some remains of the old town walls. New waterworks for the supply of filtered water to the city have been carried out with marked advantage to the health of the town. Works for underground drainage for the Northern

part of the city have been executed and drainage works are in progress throughout the remainder of the city. The total cost of these works is estimated at Rs.184 lakhs.

The Harbour. The foundation-stone of the harbour works was laid by King Edward, then Prince of Wales, on 20th December 1875, but in October 1881 the works completed up to that time were much damaged by a cyclone. These violent storms have visited Madras from time to time. Such occurred in October 1746, in 1782, 1807, and 1811. On 2nd May 1872, in another great storm, the *Hotspur* and eight European vessels and twenty Indian vessels of altogether 4133 tons were lost.

Like the greater part of the East Coast of India, the coast at Madras consists of a sandy beach shelving out gradually to a depth of 10 fathoms at a distance of a couple of miles from the shore. The harbour, therefore, has had to be an entirely artificial one. It is 200 acres in area and is formed of breakwaters extending out from the shore 3000 ft. apart, closed at their seaward end by a similar work which extends, however, to a distance of 1500 ft. North of the Northern of the two breakwaters, thus forming a shelter for the entrance, 400 ft. wide and 35 ft. deep at low water, which has been formed near the Eastern or seaward end of the N. breakwater. The Western or shoreward side of the enclosed 200 acres has been furnished with a deep-water quay, and the whole of the enclosed area has been dredged to a depth of 30 ft. A few years ago the entrance was in the Eastern side of the harbour and there were many weeks in every year when the water inside the enclosure was too rough for the convenient working of cargo. But nowadays there is smooth water inside the enclosure all the year round. There is a 9-acre inner or subsidiary harbour

for the shelter of craft of 1000 tons and downwards, and advantage of this has been taken by merchants to introduce a fleet of 60 or 80 modern steel and wooden lighters of 40 tons to 100 tons each, as well as a number of steam tugs. This inner basin is quayed and craned all round for lighter work, as is also a further 2-acre pond for the timber trade of the port. Besides the quay along the West side of the harbour, which accommodates four to six of the ordinary Suez Canal class of vessels, there are three other quays at which vessels can lie. The P. & O., City, B.I., and other liners call at the port regularly, embarking and landing passengers direct at the quays where trains come direct to ship's side. Horses also, of which a considerable number are imported at Madras from Australia, walk straight off shipboard into pad-docks. Bulk oil and kerosene are pumped ashore at three places, direct from the oil-steamers, into million-gallon tanks. There are two 33-ton and one 15-ton steam cranes and some 60 hydraulic cranes, besides a number of others. For the transit of goods through the port, between ship and rail or cart, a range of about 6 acres of fine shedding is available, besides about 5 acres of warehouse floor space for exports, all of the best and latest design for such structures. The general business of the port is conducted in a fine range of modern offices standing in the centre of the West quay. The trains of both railway administrations, one 5 ft. 6 in. gauge and the other of the metre-gauge, converging on Madras, with a reticulation of some 4000 m., enter the harbour premises, where they are handled by the Port Trust over their own mixed gauge lines. In the ten years, 1904-1914, the value of the trade of the port doubled, rising from a value of about 8 millions to about 16 millions sterling. The Port Trust

levies about 160th part of this, or £100,000, on the trade, in return for various services rendered in the passage through, including the amortisement and interest on the debt involved in the construction of the artificial harbour, the entire expenditure on which amounted to just about 2 millions sterling, of which just one half has been borrowed money, to be paid off completely in 1952.

The principal exports are hides and skins, chrome and manganese ore, magnesite, ground nuts and other oil seeds, tea, indigo, yarn and mica. The principal imports are oils, coal, metals, food grains, machinery and timber. About 620 vessels enter and leave the port yearly with a register of just about $1\frac{1}{4}$ million tons. The port lies more or less in the track of cyclones, which affect it to a more or less trifling extent every two or three years, but severely at intervals of twenty or thirty years. Provided, however, their own gear is strong enough to hold them—the Port Trust's own moorings have never failed—modern steamers pay scant attention to these cyclones; though, needless to say, to protect the sides of such vessels from *wind* is a task, on the flat course of Madras, beyond the power of any Port Authority, which at Madras has done all that is possible by securing them from *waves*. The rise and fall of tide is only about 4 ft. The old iron screw pier, so long a feature of the port, has long since been removed. General cargo vessels nowadays pass through the port in just half the time usual ten years ago. P. & O. and other passenger vessels usually pass in to the quays and out to sea again within three or four hours.

W. of the Fort, and between it and the People's Park, is a fine group of buildings, consisting of the Memorial Hall, the Medical College, the General Hospital, and the Madras Railway Station,

while a little farther on, across the Cochrane Canal, are the Jail, the Moore Market, and Victoria Public Hall, at the entrance to the Park.

The Memorial Hall is a massive building of no great architectural beauty, erected by public subscription in commemoration of "the goodness and forbearance of Almighty God in sparing this Presidency from the Sepoy Mutiny which devastated the sister Presidency of Bengal in the year 1857." It is available for public meetings of a religious, educational, charitable, and scientific character. The Bible Society occupies the basement, and the Tract and Book Society an adjacent building somewhat in the same style of architecture.

The General Hospital, opposite the Central Railway Station, is one of the largest and finest in India. The records go back to 1829. Dr Mortimer published an account of it in 1838. The hospital contains 500 beds, and is for both Europeans and Indians. The Medical College is accommodated in a large detached building to the E. side. The Central Railway Station is one of the finest in India; the clock tower is 136 ft. high. Opposite it and adjoining the Jail is the Choultry or R.H. of Sir Ramaswami Mudeliar. The Moore Market, at the entrance to the People's Park, well merits a visit in the morning. Alongside of it is the Victoria Public Hall, designed by Mr Chisholm, in keeping with the style of the station; it was erected during 1883-8. The principal hall in it measures 110 ft. by 40 ft., and takes in Madras the place of a theatre as well as of an "assembly room." To the W. of the Victoria Public Hall, in the *People's Park*, a modern office building for the Corporation of Madras, called the "Ripon Building," after the Viceroy, Lord Ripon, the founder

of local self-government in India, has been under construction. It was designed by Mr Harris, consulting architect to the Government. It is a graceful building, with a clock tower higher than that of the Central Railway Station. In the centre of the Eastern portion of the park, and to the N. of the Moore Market, the S. Indian Athletic Association occupy a large piece of land where athletic sports and annual fairs are held. The Association have erected a building called the Moore Pavilion at the Northern end of their grounds. The People's Park originated with Sir Charles Trevelyan while Governor of Madras. It embraces 116 acres of land. It has eleven artificial lakes, an athletic ground, a fine zoological collection, tennis-courts, and a bandstand.

The Poonamallee Road, skirting the S. of the quarter of Vepery and leading to the quarter of Egmore, passes the School of Arts and St Andrew's Church. The first quarter is largely occupied by Anglo-Indians, whose Association, founded in 1879, is the leading society of its class in India. The Church of *St Matthias* was given by Admiral Boscawen in place of one destroyed during the war between the French and English, and W. of the Church is the Doveton Protestant College, founded in 1855.

In the Egmore quarter are the main Station of the South Indian Railway, the Maternity and Ophthalmic Hospitals, and the Museum.

The School of Arts was established as a private institution by Dr Alexander Hunter in 1850. Besides drawing, painting, engraving, and modelling, the crafts of cabinet-making and carpet-weaving, pottery and lacquer, metal and jewellers' work, are taught to the 450 scholars.

St Andrew's Church was built in

1818-20 at a cost of £20,000, the architect being Major de Havilland. The Madras stucco, or *chunam*, in the interior gives to the pillars all the whiteness and polish of the finest marble. The steeple rises to the height of 166 ft., and, with the lighthouse tower of the High Court, is the principal landmark in Madras; the building is remarkable for the complete substitution of masonry for timber, which might be destroyed by white ants.

From St Andrew's Church, Pantheon Road leads S.W. to the Museum, which forms the centre of a fine group of buildings, including the Victoria Technical Institute, the Connemara Library, and the New Theatre, to which the Empress Victoria Memorial Hall, a graceful building, of which King George, then Prince of Wales, laid the foundation-stone on 26th January 1906, and which was opened in March 1909, has been added. The collection now in it was formed in 1846, and owes its present development to Dr Balfour. In the various Departments of Natural History, Botany, Geology, and Industrial Arts are many objects of great interest; but the Department of Antiquities and Archaeology, which contains some very beautiful remains of the Buddhist tope at Amaravati (p. 459), excavated by Mr R. Sewell, M.C.S., will probably be found most interesting of all. The sculptures originally discovered at this site are now exhibited on the great staircase of the British Museum. Other objects of interest formerly in the Arsenal and now in the Museum are—iron helmets captured at Manilla; a gun captured from Holkar in 1803; the cage in which Captain Anstruther, R.A., was confined in China; and some leathern petards.¹ The Library

¹ One object of special interest is a victim-post surmounted by an elephant's head, at which human sacrifices were made.

has a fine reading-room, in which works relating to Madras and S. India can be consulted; the books of the Madras Branch of the Royal Asiatic Society have also been kept here of late. A number of archaeological remains are arranged in the pretty grounds in front of the Museum. The statue of Lord Cornwallis, removed from the fort, has been placed in the reading-room.

From near the Museum the Commander-in-Chief's Road leads to the bridge so named, and so to Mount Road, opposite the Club; and the road crossing the Coom River by Anderson Bridge leads past the Old College, corresponding, to the Writers' Buildings in Calcutta (p. 90), to the old Observatory. This originated in a small private observatory started in 1787 by Mr W. Petrie, a scientific member of Council. The present building was erected in 1793 by Michael Topping, under orders from the Directors of the East India Company. It stands in N. latitude $13^{\circ} 4' 6''$, E. longitude $80^{\circ} 14' 54''$, and used to give railway time for all India. It is now used as a meteorological station only, the actual observatory having been moved to Kodai-kanal (p. 589).

From the Observatory a thoroughfare runs S. to the Horticultural Gardens and St George's Cathedral, towards the S.W. end of Mount Road. The gardens, which occupy an area of 22 acres, are laid out in a highly ornamental manner. Many rare trees, shrubs, and plants are to be seen there, one of the great attractions being the splendid *Victoria Regia*, in a couple of small ponds. The Society possesses a valuable Library, containing many rare works. The gardens were brought into existence mainly through the efforts of Dr Wright about the year 1836.

The Cathedral of St George stands in an enclosure on the E. side of the gardens. The exterior is not handsome, but the dazzling white *chunam*, the decorated roof, the very numerous and remarkably handsome tablets and tombs, and the lofty and massive pillars in the interior, produce a very pleasing impression. At the E. end of the N. aisle is a fine monument to the Right Rev. Daniel Corrie, LL.D., first Bishop of Madras in 1835. The monument to Bishop Reginald Heber, of Calcutta (d. 1826), is on the N. wall of the N. aisle, and represents him confirming two natives. There is also a monument to Major George Broadfoot, C.B., who was one of the illustrious garrison of Jalalabad, and was killed at the Battle of Ferozshahr (Ferozeshah) (see p. 353). The Church was consecrated in 1816, and became the Cathedral Church of the diocese when that was constituted in 1835.

From the Cathedral the road to Guindy and the Southern suburbs runs along the side of the great Long Tank, which should be viewed from the top of the embankment, for nearly 3 m. to the Marmalong Bridge (said to be *Mamillanna*, "Our Lady of the Mangoes"), spanning the Adyar River. It has twenty-nine arches. Near the N. end is an inscription in English, Latin, and Persian, which says that the expenses of the bridge were defrayed from a legacy left for the purpose by Adrian Fourbeck, a merchant of Madras. To the right and left of the road before crossing the river will be observed the *Teachers' College* and the *Government Veterinary Hospital*. The former *College of Agriculture* and the *Saidapet Model Farm* have been closed, and a central Agricultural College and Research Institute has been established in Coimbatore. At Saidapet are the headquarters of the Chingleput District.

The Little Mount is a curious

spot on a rocky eminence on the left of the road, on the right bank of the Adyar River, after crossing Marmalong Bridge. This place is famous in connection with the tradition of the martyrdom of the Apostle St Thomas. It was formerly called Antenodur, but the Portuguese named it Little Mount to distinguish it from St Thomas's Mount, which they called Big Mount. The Apostle St Thomas, so runs the tradition, used to live here periodically and pray on the top of the hill (Little Mount) according to the Jewish custom. When praying in the cave he was, it is said, mortally wounded by a lance. In that state he ran to St Thomas's Mount, where he was killed. His body was carried by his converts to San Thomé, where it was buried, and his tomb is in the Cathedral of San Thomé.

A flight of steps leads to the Church. On the left of the entrance is a portrait of St Thomas with an old Portuguese inscription. The Church was built by one Antonio Gonsalves De Taide, 1612 (who appears to have been a Goanese), and was endowed with 32 acres by the Nawab of Arcot. It is dedicated to Our Lady of Health, and has a congregation of 200. Descending some steps on the left from the Church, a slope leads down to a *cavern* hewn out of the rock. The entrance is narrow, and to enter it is necessary to stoop; there is nothing to see but an altar with the image of St Thomas, where mass is occasionally said. Daylight is admitted by a narrow aperture, through which, it is said, St Thomas escaped the Indians who wished to slay him. In the vestry-room is a Missal with the date 1793. A dark cell full of bats is reputed to be the oldest part of the Church, where St Thomas himself worshipped.

Masonry Cross. At the N. of

the Church there is a masonry cross on the top of a rock. From this spot St Thomas is said to have preached.

To the W. of the Church there is a cleft in the rock, which, it is said, was miraculously made by St Thomas to provide himself with water. The small Greek cross and foundation of a building are relics of St Thomas's prayer-house. At the foot of this rock, at the S. there is St Thomas's Fountain, which has water throughout the year. At the E. of the Church there are some rocks believed to be marked with the prints of the feet, hands, and knees of St Thomas, where he lay prostrate on them when he was wounded. The general tradition that St Thomas was martyred on 21st December 68 A.D. at Mylapore, which H. H. Wilson (*Roy. As. Soc., Trans.*, i, 161) identified with Mihilaropye, or Mihilapur, now St Thomé, is not accepted by modern criticism.

An annual feast takes place here in May, attended by about 30,000 pilgrims. This Mount is a small sanatorium to the people of Madras, and there are several houses to rent. At the top of the parochial house, about 90 ft. high, there is a visitors' room furnished; fine views of Madras, St Thomas's Mount, the Governor's House, Guindy, the King's Institute, Teachers' College, and the surrounding hills and country may be obtained from here. Visitors are welcomed, and a guide is available.

Beyond the Little Mount is Guindy Park, the Governor's Country House, standing in a large park with many deer. It has a very handsome appearance, being faced with the beautiful white *chunam* for which Madras is so famous; the centre room, which is used as a ball-room, contains a good bust of the Duke of Wellington. The flower-garden lies to the S., and is 8½ acres in

extent, and there are detached bungalows for the staff in the park.

The Race-course, close to Government House, is $1\frac{1}{2}$ m. long. On it is an obelisk to Major Donald Mackey, who died in 1783.

St Thomas's Mount, or the Great Mount, 8 m. S.W. of Madras, lies S. of Guindy railway station; the double hill is only 100 ft. to 200 ft. high. Pallavaram, a hill about 500 ft. high, with a long, low range extending from it (station 1 m. distant), rises 3 m. farther S. It is one of the most interesting places near Madras. It is a military dépôt with an European battery of Artillery and a regiment of Indian Infantry. At the base of the Mount are the *Cantonment* and the building which used to be the headquarters of the Madras Artillery. The mess-rooms are among the finest in India. The present name was given only when Europeans settled in the place, and till then neither the town nor the hill had any special name. This is shown by the present Indian name, *Faranghi Malai* (i.e., the "Hill of the Franks"), used to denote the hill and the town around its base. The name of St Thomas's Mount the first European settlers found to be the most appropriate, as the apostle St Thomas, according to the old and commonly believed tradition, was said to have been martyred on this hill in 68 A.D., whilst kneeling on a stone which is now on the central altar of the Church. The stone has an inscription in Pahlavi (a dialect spoken in those days in the suburbs of Madras), which alludes to the apostolate and martyrdom of the apostle in India. The tradition is that a Brahman transfixed the apostle with a lance, relics of which are kept in the Cathedral

at Mylapore. The Church in which this stone is kept was built on the summit of the hill by the Portuguese in 1547, so that it is one of the most ancient on the Coromandel coast. Over an archway is the date 1726, and within are several slabs with epitaphs. The main gate and portico were built by one C. Zacharias in 1707 A.D. Behind the altar and above it is a remarkable cross, discovered by the Dutch in 1547, with a Nestorian inscription in Sassanian Pahlavi of about 800 A.D. The inscription begins to the right of the top of the arch. Dr Burnell translates it: "Ever pure . . . is in favour with Him who bore the cross." Besides the stone, the Church contains a picture of the Virgin Mary, said to have been painted by St Luke, and brought by St Thomas to this place. The hill is about 250-300 ft. above sea-level, and has a flight of 132 steps, built by an Armenian, for the convenience of pilgrims, visitors, etc.

In the 15th century the Nestorian Church in India fell into decline, until in most places it totally disappeared, as at St Thomas's Mount, though the declivities of the wooded hill continued to be the resort of Nestorian monks till the beginning of the 16th century, when the Portuguese built the above-mentioned Church and occupied it and the hill up to the present day. The Church is dedicated to Our Lady of Expectation, and is under the care of the R.C. chaplain at St Thomas's Mount.

Next to the Church there is a Convent of Franciscan Missionary Nuns of Mary, who are in charge of an Indian girls' orphanage and industrial school.

The English Church, a few hundred yards from the mess-house, is a handsome building with a

well-proportioned steeple. There are monuments here to several distinguished officers.

Pallavaram, the next station to St Thomas's Mount on the S.I. Railway, is also a small Cantonment. 2 m. from the station is the site of old Pallavaram, where there are three rock-cut shrines ascribed to the 7th century A.D. One of these is now in the possession of Muhammadans, who have placed in it the *panja*, or hand symbol.

ROUTE 34.

MADRAS to Salem, Erode, Podanur (for the Nilgiris), Olavakkot, Shoranur (for Cochin), Calicut, Tellicherry, Cannanore, and Mangalore, 552 m. by the S.W. Line of the Madras and S. Mahratta Railway, and the S. Indian Railway.

Madras to (43 m.) Arkonam junction (Route 26).

Arkonam to (132 m.) Jalarpat junction (Route 32 (b)). From here the line is that of the S. Indian Railway.

207 m. Salem station (R.). The railway station is at Suramangalam, 4 m. from the town. Salem (population 59,153) is the headquarters of the District of the same name.

The Shevaroy Hills. Conveyances to the foot of the hills, and a chair and coolies for the ascent, can best be obtained by writing in advance to the station-master at Suramangalam. There are also suppliers in Salem town. The journey to the foot of the

hills is performed in a *jhatka* (covered pony-cart). The ascent (7 m.) has to be performed in a chair carried by coolies (bearers), ponies being no longer available. Coolies can also be hired for light packages; heavy luggage can best be sent by cart (Rs.4) from Salem by the new ghat road. The ascent by this road (13 m.) can also be made by motor-car or motor-cycle. Cars and cycles, however, cannot be hired. The scenery along the whole length of the road is magnificent. The road surface is good and the gradient moderate. There are, however, a number of hairpin corners, which are not easy for a car with a long wheel base. Bullock-coaches cannot be got now. A bullock-cart can be got, but it is not to be recommended for the passenger's own use, though good for luggage.

Yercaud is a small town, the height of which varies from 4000 ft. (at the lake) to about 4800 ft. above sea-level. Yercaud and the Shevaroy Hills have excellent roads; the gradient is steep in places, but negotiable by motor-cars and motor-bicycles—many residents use one or the other form of conveyance. Bungalows are frequently available for a moderate rent in the season (April to June). Most of them have picturesque gardens, the climate of the hills being peculiarly good for gardening operations and horticulture. Many imported trees and plants flourish. There are a Church, a Club, a Post and Telegraph Office, etc. Fair Lawns Hotel has very beautiful grounds. The summer climate varies from about 65° F. to about 78° F. In winter the thermometer goes down to 45° F. or lower.

Yercaud and its surroundings, though they cannot vie with the Palnis and the Nilgiris in grandeur of scenery, are unrivalled in S. India for picturesqueness: nowhere else can so many beautiful sights be seen with so little trouble by a fair

walker. A few of the best viewpoints are given below, with their approximate distances from Yercaud (Church gate) :—

	Miles
Ladies' Seat	1½
Prospect Point	1½
Bear's Hill	1½
Pagoda Point	2
Kiliyur Falls (after rain)	2½
Shevaroyan (5314 ft.)	3½
Honey Rock	6½
Shengalvaray Precipices (2 m. of difficult walking)	14

The Shevaroy Hills cover an area of about 100 sq. m., the elevation ranging from about 3500 ft. to about 5300 ft. The district consists mainly of coffee estates, broken up by picturesque villages and "greens," inhabited by hill folk (Malayalis). Only the highest points (especially the Shevaroyan and the Green Hills), are cultivated and covered with short grass, varied by *shola* (evergreen hill-trees). The amount of rubber is small at present compared with the area under coffee. The hospitality of the planters of the Shevaroy Hills is proverbial. A visitor armed with an introduction will find a visit to a coffee estate full of interest and instruction. Botanists and entomologists will find a visit to the Shevaroy Hills a profitable investment of time.

243 m. Erode junction station (R. and D.B.). Here a branch of the S. Indian Railway runs to (88 m.) Trichinopoly junction.

On this branch at 19 m. Unjalur station is a very pretty village, with fine trees and a long coconut avenue. Close to the station, in an enclosure, several huge terra-cotta figures of horses and other animals can be seen from the train; similar figures may be seen at many places in the Madras Presidency.

40 m. Karur station. This was the capital of the ancient kingdom of Chera. The fort was con-

stantly besieged both in ancient times and during the wars with Tipu Sultan. In 1801 it was abandoned as a military station. The ruins of the fort and old temple are both interesting.

88 m. Trichinopoly junction (Route 35).

302 m. Podanur junction station (R.).

From here the line for the Nilgiris turns N., and passes to

305 m. Coimbatore station, 1480 ft. above sea-level (population 60,195). D.B., with first class and second class accommodation. There is a large central jail 1 m. N.W. of the railway station. All Souls' Church is ¾ m. to the N.E., and the Club is near it. The Agricultural College and farm, the Forest College and Forest Museum are 2 m. distant. The great sight of Coimbatore, 3 m. distant, is the Temple of Perur. A view of a pillar in it is given at p. 399, vol. 1 of the *Hist. of Indian Architecture*. Mr Fergusson says: "The date of the porch at Perur is ascertained within narrow limits by the figure of a Sepoy loading a musket being carved on the base of one of its pillars, and his costume and the shape of his arm are exactly those we find in contemporary pictures of the wars of Aurangzeb or the early Mahrattas in the beginning of the 18th century. (The inscriptions copied at Perur refer themselves to the 12th century and later.) The bracket shafts are attached to the piers, as in Tirumal Nayak's buildings, and, though the general character of the architecture is the same, there is a coarseness in the details, and a marked inferiority in the figure sculpture, that betray the distance of date between these two examples." In front of the temple, which is a small one, there is a Dwaja

Stambha, or stone flag-staff, 35 ft. high. The central shrine of the temple is dedicated to Goshthisvara. The shrine of Sabhapati, a name of Siva, occupies only a subsidiary position. There is a smaller temple to Patteswar. They were both built in Tirumal's time. There is only one gopuram, with five storeys, about 55 ft. high. In the corridor leading to the vimana there are eight very richly-carved pillars on either side in the front row, and behind them eight smaller and plainer. From the ceiling hang several chains, perhaps an imitation of the chains with bells which hang from the Dwaja Stambha in front of the building. The pillars represent Siva dancing the Tandava; Siva killing Gajasur, the elephant-headed demon, appropriate enough in a locality where wild elephants used to do such mischief; Vira Bhadra slaying his foes; and the Sinha, or lion of the S. Siva is represented as treading on the head of the elephant-demon, whose skin is seen.

327 m. **Mettupalaiyam station**—(R.). This is the terminus of the broad gauge railway, and from here the narrow gauge Nilgiri Railway runs to (17 m.) Coonoor, and has been extended to Ootacamund, 12 m. farther on. This railway is on the metre-gauge, and on the mountain gradient is furnished with a central rack rail, enabling it to ascend one in twelve. The scenery is fine, though not so fine as on the Darjeeling Railway, and the journey up, in the course of which the line ascends 4000 ft., occupies 5 hrs., the journey down occupying 4 hrs.

Coonoor is 6100 ft. above sea-level. The climate is about 6° warmer than that of Ootacamund, the mean annual temperature being 65°, and the rainfall 55 in.

In Coonoor itself there is not much to see, but there are pretty walks round the place, which will occupy the spare time of two days. A Pasteur Institute for S. India has been established here. The mildness of the climate has made Coonoor a favourite resort for persons of delicate health.

Sim's Park, a prettily-laid-out public garden, contains an excellent collection of plants. One shady dell is full of splendid tree-ferns and other ferns of large size, and is overshadowed by large trees of scarlet rhododendron. Below the park is the *Wellington Race-course*. A ride of 4 m. as the crow flies, but of 7 m. following the windings of the path, brings the traveller opposite to the *St Catherine's Waterfall*, which is situated N.E. of Coonoor. The road leads for 3 m. along the skirts of pretty woods, or *sholas*, as they are here called, and then, turning off into a valley, reaches (4 m.) a rocky bluff called *Lady Canning's Seat*. Below, to the S. and E., lie extensive coffee plantations. The path then descends considerably, and turns S.E. to a high bluff with a path all round it, overlooking the chasm into which the stream that makes the St Catherine's Fall takes a leap of 250 ft. into a very deep ravine. On the other side—i.e., S.W.—of Coonoor, at about the same distance therefrom, there is another waterfall near Kartairi, which has been harnessed to supply electric power for the Government Cordite Factory at Aruvankadu, near Wellington—a huge enclosure with a high wall running round it for several miles.

An *Excursion* may be made to the **Hulikal Drug**, or Tiger-rock Fort, which is on the summit of a hill that towers up to the left of the pass in ascending from Mettupalaiyam. It requires a whole day from dawn to sunset, and is rather fatiguing. The road to it

turns off at the first zigzag on the new ghat about 2 m. from Coonoor. A rough bridle-path along the ridge leads to it. The peak is about 6294 ft. high, and commands in clear weather a splendid view.

From the Post Office at Coonoor it is about 3 m. to the barracks at Wellington. About $\frac{1}{2}$ m. before reaching the barracks a very pretty fountain at a cross-road is reached, and the road to the barracks turns off sharply to the left. The buildings, an unsightly pile nearly 900 ft. long, but believed to be among the finest in India, lie half-way up a very steep hill, on which is the Commandant's house, with a pretty garden. The barracks were built in 1860, and were added to in 1875. The water supply is brought from the Rallia Plantations, 3 m. away. A large piece of ground close to the barracks is cultivated by the soldiers, where both flowers and vegetables are very successfully grown. The mean annual range of the thermometer is 64°, and of the barometer 24°. The rainfall is about 70 in.

Kotagiri, the oldest and third largest hill station on the Nilgiri Hills, is an ideal sanatorium, and is much liked as a rest-cure resort. It is rapidly expanding, and many houses for Europeans have been built during the last few years. It is 6511 ft. above sea-level, has some good scenery, and commands a wide landscape all round. It has a small club and a library attached to it. There is also a golf-links of nine holes.

Ootacamund (lat. 11° 24', long. 76° 44'). From Wellington to Ootacamund is 9 m. The old road is well planted with trees; in parts it skirts a precipice of some hundred feet in height. (Consult the History of Sir F. Price for Ootacamund.)

Ootacamund (mund = "village of

huts") is surrounded by lofty hills. Of these Dodabetta on the E. is the highest, being 8640 ft. above sea-level; but there are also other lofty hills, as Elk Hill, 8090 ft. high. The Lake is about 2 m. long from E. to W., but narrow. It is 7220 ft. above sea-level, and the road round it is one of the pleasantest drives in the place. The principal Church, *St Stephen's*, is near the Club, the Post Office, the Public Library, and the principal shops. The market is close to the E. end of the lake, and the Jail is to its W. on the N. side. St Thomas's Church is on the S. side of the lake, and close to it W. of the Willowbund. The railway crosses the lake immediately to the W. of the bund, and the station lies N. of the lake, between Lake Road and Hadfield Road.

The *Botanical Gardens*, through which Government House is approached, were established in 1840 by public subscription, and are beautifully laid out in broad terraces one above another at the foot of a hill, which gradually rises till it culminates in the peak of Dodabetta, 1206 ft. above the gardens and 8640 ft. above the sea. The Superintendent's house is charmingly situated.

The *Cinchona* Plantations, above the gardens, are not much in point of appearance, as the tree is low (25 ft.), and has but little foliage. The chief varieties cultivated are *Cinchona Officinalis* and *C. Succirubra*, with resultant hybrids. Formerly the system pursued was that after the tree had grown eight years it was barked, half of the bark being taken off in six months during the rains, and the other half the next year. The tree then rested one year, so that each yield took three years. The Dutch system, now followed, consists of shaving off the outer layers of bark, never completely stripping any portion

of the tree. The bark is worked up into sulphate of quinine and cinchona febrifuge in the factory at Naduvattam.

From the top of the ridge a most superb panorama is seen. To the S.E. is Elk Hill, behind which, and not visible, is the *Lawrence Asylum*, 7330 ft. Farther to the S. of the lake is *Chinna Dodabetta*, or Little Dodabetta, 7849 ft., and in the far W. *Cairn Hill*, 7583 ft., Ootacamund itself and its lake, and St Stephen's Church Hill, 7429 ft. Beyond, to the N. of the lake, are still higher hills, as *Snowdon*, 8299 ft., and *Chub Hill*, 8030 ft. The finest view, however, is to the E. Here is *Orange Valley*, where oranges once used to grow. To the N. is the Moyar Valley, ignobly termed the "Mysore Ditch," but really profound and gloomy with forests and the shadows of overhanging hills. To the E. are seen dimly the Gajalhatti Pass and N. Coimbatore mountains, covered with dense forests abounding with game.

The *Lawrence Asylum*, 5 m. from the Post Office at Ootacamund, is a handsome structure, with a tower over 70 ft. high, situated in a lovely valley. The dining-room is large enough to accommodate 300 boys. In it are good portraits of Sir Hope and Lady Grant. The boys learn, among other things, telegraphy, and compete for appointments in the Government Telegraph Department; others are taught trades, and some are enlisted in regiments stationed in India. The return to Ootacamund may be made by another road, past a fine piece of water, and through tea plantations.

In many of the compounds or grounds at Ooty are beautiful shrubs. *Heliotrope* has been known to grow to 10 ft. in height and 30 ft. in circumference, and a *verbena* to 20 ft. in extent.

N.W. of the lake are the downs, with the golf-links. The downs,

which consist of grassy slopes and dales, with woods (*sholas*) and streams interspersed, are the scene of the well-known hunting attractions of Ootacamund. They are known as the Wenlock Downs (after Lord Wenlock, formerly Governor of Madras), and cover an area of 30 sq. m. Their presence and the absence of alpine foliage give Ootacamund a very different appearance from the N. hill stations of India. Recently trout fishing has been started in the more important streams and rivers on the plateau, and some good sport has been obtained.

The Murkurti Peak (or *Taiganam*) is 16 m. due W. of Ootacamund, among the grand mountains of the Kundas, where the scenery is magnificent. $5\frac{1}{2}$ m. can be driven; the remaining $10\frac{1}{2}$ m. must be done on horseback. Refreshments must be taken. This peak is 8380 ft. high, while Avalanche Hill is 8497 ft., and Kunda Peak 8304 ft. "It is a spot held sacred by the Todas as the residence of a personage whom they believe to be the keeper of the gates of heaven." The religion of this singular tribe has not yet been definitely ascertained. The road to the peak passes along the ridges of the Governor Shola range of hills, crosses the Parsons Valley and Krurmund streams, and for some distance follows the windings of the Murkurti stream, which is the head of the Paikara River. From the head of the Paikara an easy ascent of $1\frac{1}{2}$ m. leads to the summit of the peak; and there, should the mist and clouds fortunately roll away, a grand scene will present itself to the view. Towards the S. the N. termination of the Kunda range can be seen rising in abrupt escarpments and vertical precipices to an enormous height, excavated and furrowed by deep ravines, while the N. side of the

mountain is a terrific and perfectly perpendicular precipice of at least 1500 ft. The mountain here seems to have been cut sheer through the centre, leaving not the slightest shelf or ledge between the pinnacle and the level of the plains below. On the W. side the picturesque paddy flats of the Wynaad, which appear amidst dense jungle, and the plains of Malabar as far as the Arabian Sea are seen in vivid contrast to the blue mountain ranges of Ootacamund and the heights of Dodabetta that present themselves to the view on the E.

Other sights on the Nilgiris are the *Waterfalls at Kal-Hatti* and the *Paikara Falls* at the N.W. corner of the plateau. There is also another much finer fall in the heart of the Kundas, formed by the Bhawani, 400 ft. or 500 ft. high, and surrounded by scenery of the most savage grandeur; but it is difficult of access. The *Ranga Swami Peak* and the fortress of Chaki, Rangaswami Pillar, otherwise known as Huli-kal Drug or Pakasurakottai, may also be visited. The native villages of the Todas (the aboriginal hill tribe) and other tribes may be seen in these expeditions.

Stone circles, which the Todas call *Phins*, and which contain images, urns, relics, and some very prettily-wrought gold ornaments, are found in many parts of the hills; but the most convenient locality for a visit from Ootacamund is the Hill of Karoni, 3 m. to the S. The circles are built of rough unhewn stones, some of them of large size, which must have been brought from a considerable distance. The history of their construction is unknown.

Sport on the Nilgiris is varied and interesting. Along the jungled slopes of the plateau and in the extensive forests on the Wynaad plateau roam herds of elephant and bison, which occa-

sionally mount to the Kunda plateau. Tigers, although not plentiful compared to other parts of India, are shot to the number of twenty or thirty every year, and those that have lived on the plateau for any length of time exhibit magnificent furry coats.

Panthers are numerous, and the black variety, so rare in most parts of India, is comparatively common. Owing to the exertions of the Nilgiri Game Association, which was founded in 1877, the game on the hills, at one time in danger of extermination, has greatly increased, and is still increasing. It is not uncommon in the wilder part of the Kundas to see from one standpoint sixty or seventy sambhur (the red deer of India) grazing on the grassy slopes or nibbling the young shoots of bamboo along the edge of the *sholas*.

The Nilgiri "ibex," an unique genus of the goat tribe whose habitat is confined to the Madras Presidency, is found along the precipitous sides of the plateau. Owing to the extreme wariness of the ibex and to the dangerous nature of the ground, the sport of ibex stalking is one of the finest in the world, calling for a steady nerve and the instinct of a sportsman. On the plateau, too, occurs in considerable numbers, although less common than formerly, the little barking deer or Munt-jac, locally known as the "jungle sheep."

The chital, or spotted deer, the most beautiful of all the deer family, frequents the lower slopes of the plateau and the valleys of the Moyar and the Bhavani rivers, and here, too, are found the nilghai and the four-horned antelope.

To complete the list of large game in the Nilgiris may be added the sloth bear, the hyena, and the wild boar, the last of which is a sad enemy to the potato crops of the peasantry.

For the possessor of a shot-gun there is also a considerable variety of sport. From September to March snipe may be found all over the plateau, and although no bags comparable with those obtained on the plains of India are to be got, smaller bags are compensated for by the pleasure of being able to use spaniels and other English sporting dogs to put up the birds before the gun. The wood-cock, the solitary, and the wood-snipe are all found during this time of the year, and by those who know their habits a good deal of sport can be obtained. The only indigenous game bird of importance on the plateau is the "jungle cock," whose cheerful crowing at sunrise and sunset adds so much pleasure to life in the forest. They are carefully protected and encouraged by the Game Association, which has also been at considerable trouble to introduce other sporting birds.

Below the plateau the peacock is very common, and there are several varieties of quail, the common brown partridge, the spur-fowl, and pigeons of various kinds, two of which, the Nilgiri wood-pigeon and the Imperial pigeon, are also found on the plateau itself.

For the fisherman the Nilgiris have also special attractions. The Moyar and the Bhavani and their tributaries are the home of the mighty mahsir, and the rivers are under strict conservancy. On the plateau many miles of beautiful hill streams have been stocked with trout, and sport equal to the best that English streams afford can be obtained with a very moderate expenditure of money and trouble. Last, but not least, comes Mr Jorrock's "Sport of Kings." Ootacamund is celebrated throughout the East for its hunting. The Ooty Hunt has a history dating from 1847, unbroken

except during the Mutiny, and boasts of a pack of from 50 to 60 couple of foxhounds, partly imported year by year from England, and partly bred and reared on the hills, together with excellent kennels and a large staff. The hunting season lasts from April to the end of October. There are no foxes, but the hill jackal is no mean substitute, and is a very different-looking animal from his brother on the plains. A really good horse and stout nerve are required to see the finish of a run with the Ooty hounds.

From Podanur (p. 560) the railway to the W. coast runs through the gap in the ghats, 20 m. broad, known as the Pal Ghat gap, the only real break in the 600 m. of the W. Ghats. All this portion of the line is very picturesque; it runs through dense forest, with fine views of the bare mountain-side close at hand on the N. The mountains on the S. side of the pass are only visible here and there in the distance.

332 m. Olavakkot junction, from which there is a short line (3 m.) to Pal Ghat (population 50,000); (D.B.), the second town of the District. The fort, built by Hyder 'Ali in 1766, was captured in 1784, and again in 1790. The glacis, moat and walls are in good preservation, and the situation is very fine. Golf-course.

360 m. Shoranur junction (R.), for the Cochin State Railway, giving access to British Cochin. Across the Ponnani River is a D.B.

British Cochin (D.B., Club) is the earliest European settlement in India. The Portuguese, under Cabral, landed here in 1500 and founded a factory. Vasco da Gama landed, 1502. Fort built, 1503. English factory, opened,

1634. The Dutch took the fort, 1663. The English took Cochin, 1795. A picturesque town, beautifully situated on the sea at the mouth of a magnificent natural harbour, connected by backwaters and canals with the chief towns, both N. and S. It is the chief port of Malabar; the value of the trade is nearly 500 lakhs. There are steam ferries to Ernakulam (Cochin State) and motor boats down the backwaters to Travancore: there is a pier in Muttancheri. St Francis' Church is the oldest European Church in India. There are a colony of white and black Jews, and a synagogue with beautiful blue and white porcelain tiles. The Resident in the Cochin State has a house at Bolgotty, an island in the backwater.

From Shoranur junction a branch line runs (21 m.) to Trichur and (65 m.) Ernakulam (Cochin). At Trichur there is an ancient, interesting temple, which was quite possibly a Buddhist shrine in the first instance; there is a R.H. of the Cochin State here, and at Ernakulam is a beautiful palace of the Raja of Cochin. Between Trichur and Cochin is a most picturesque backwater, sometimes of the size of a lagoon, and sometimes of a broad river.

At Ernakulam, on the mainland, are the residence of the Raja of Cochin, His Highness Raja Sir Sri Rama Varma, who succeeded in 1914, and the State offices. A mile from it, in the middle of the lagoon, is the Residency Island, with a beautiful garden, and 3 m. across the lagoon, at the N. end of a long, sandy spit, is the town of British Cochin, Kuchi Bandar (population 18,000). The steamers which call at the Port are obliged to lie out $1\frac{1}{2}$ m. from the shore, as the shallow water on the bar only allows country sailing craft to use the inner harbour. Various

schemes for deepening the bar have been considered and rejected during the last forty years, and the matter is still receiving the attention of experts. Trade is of a value of 210 lakhs yearly. The town runs along the Western shore of the spit facing the lagoon; at the N.W. end are a grassy open space, round which the houses of the Europeans are built, and the remains of an old fort. The long main street is picturesque; at the S. end of it is the Jews' quarter, with their old synagogue in the middle. This contains some fine tile-work and woodwork. The Jews are divided into two sections, —the black, who are believed to have been settled in this country ever since the 3rd and 4th century A.D., and the white, who are believed to have arrived here at a much later date. Elephantiasis is unhappily common in Cochin.

There is an interesting sect of Christians in Cochin State and elsewhere on the Malabar coast, especially at Kottayam in N. Travancore — the *Nazarani*, (= Nazarenes) commonly called Syrian Christians. They are often termed Nestorians, though they themselves do not accept the name. They ascribe their conversion to the preaching of St Thomas, and until the arrival of the Portuguese they were a united Church, holding a simple faith. About 350 A.D. they were joined by a colony of Syrian Christians; and by more about 1000 A.D. from Bagdad, Nineveh, and Jerusalem. As early as the 9th century they were high in favour with the Raja of Travancore.

About 1600 the Portuguese, under Cardinal Ximenes and the Goa Viceroys, tried to extirpate the Jacobite heresy, which naturally took firm root in a community recruited from Persia and Turkish Arabia. The Dutch put an end to this persecution; but when the Portuguese rule ceased in 1663 the Nazaranis were left a divided

Church. From that date to the beginning of the present century the Church, by "schisms rent asunder," was administered partly by Indian Bishops and partly by Bishops from Syria, and to this day there are two Bishops, whose adherents are designated respectively Jacobite Syrians and Reformed Syrians.

Cochin is of special interest as the earliest European settlement in India, Calicut having been the scene of the first arrival of Europeans.

In 1500 the Portuguese adventurer Cabral (p. 565), after having cannonaded Calicut, landed at Cochin and met with a friendly reception from the Raja, a reluctant vassal of the Zamorin. Cabral returned to Portugal with a cargo of pepper, and was followed by Juan da Nova Castello. In 1502 Vasco da Gama, on his second voyage, came to Cochin, and established a factory. In 1503 Albuquerque, the Portuguese admiral, arrived just in time to succour the Cochin Raja, who was besieged by the Zamorin in the island of Vypin. He built the Cochin fort, called "Mannel Kolati," the first European fort in India, just five years after da Gama had arrived on the Malabar coast. Albuquerque returned to Portugal, leaving Cochin guarded by only a few hundred men under Duarte Pacheco, when the Zamorin, with a large host, invaded the country by land and sea. Pacheco, with his brave band of 400 men, firmly resisted all the attacks of the Zamorin, and at last forced him to retreat to Calicut. In 1505 Francisco Almeyda, the first Portuguese Viceroy of India, came to Cochin with a large fleet, and was in 1510 succeeded by Albuquerque. On Christmas Day 1524 da Gama died here, and was buried in the principal chapel of the Franciscan monastery, now the English Church. His body was afterwards (1538) removed to Portugal,

and rests in the Belem Church. In 1530 St Francis Xavier, the apostle of the Indies, preached in these parts and made many converts. In 1557 the Church of Santa Cruz was consecrated as the cathedral of a Bishop. In 1577 the Society of Jesus published at Cochin the first book printed in India. In 1585 Cochin appears to have been visited by the English traveller Ralph Fitch, with his band of adventurers. In 1616 the English, under Keeling, engaged to assist the Zamorin in attacking Cochin, on an understanding that an English factory was to be established there, which, however, was not established till 1635. In 1663 the town and fort were captured from the Portuguese by the Dutch, and the English retired to Ponnani. The Dutch greatly improved the place and its trade, building substantial houses after the European fashion, and erecting quays, etc. In 1776 the State of Cochin was subjugated by Hyder 'Ali. In 1792 Tipu Sultan ceded the sovereignty to the British, and in 1796 it was taken by them from the Dutch.

Periyar is S.E. of Cochin about 120 m. *via* Kottayam, and about 70 m. S. of Kodaikanal. The dam of the Periyar River irrigation scheme is 1200 ft. by 1550 ft. By this dam, the river, which flowed to the Indian Ocean, has been turned so as to flow into the Bay of Bengal, irrigating the country on its way. The lake is 6560 acres and 8000 acres at different levels. Water is taken out through a tunnel of average section 12 ft. by 9 ft. and length 5940 ft. The maximum discharge through it is only 1300 *cusecs*, and irrigates 150,000 acres. The surplus is let back into the river through a regulator of ten vents of 36 ft. by 16 ft., fitted with Stoney's shutter. This great work was carried out under the control of Colonel Pennycuik, R.E., C.S.I.

388 m. Tirur (D.B.). Roads for Ponnani and Malappuram meet here. The famous Malabar back-water system of communication comes in contact with the railway here. Motor-boats ply, in connection with the trains, to Ponnani. At Malappuram (D.B.) there is a detachment of British troops. The Special Reserve Police has its headquarters here.

Tanur (D.B.), an important fishing village. The Government Fisheries Department has a fish-curing and canning factory here. A fine mosque. Visited by St Francis Xavier, 1546.

404 m. Kadalundi. Station for Beypore, 8 m. S. of Calicut. A small port, for a long time the terminus of the S.W. line of the Madras Railway.

414 m. Calicut station * (population 78,417; good D.B., also a hotel and club.) Anchorage 2 m. from shore. Boats, Rs.2½ each. Golf-course.

Buchanan (2, 474) says: "The proper name of this place is *Colicoda*. When Cheruman Perumal had divided Malabar among his nobles, and had no principality remaining to bestow on the ancestors of the Tamuri,¹ he gave that chief his sword, with all the territory in which a cock crowing at a small temple here could be heard. This formed the original dominions of the Tamuri, and was called Colicudu, or the Cock-crowing." The town is spread over an area of 13 sq. m., being 6 m. in length and averaging 2 m. in width. To the S. is the Mappilla² quarter, with a number of mosques. These formerly turbulent people are descended from Arab settlers on the coast. To the

N. at West Hill railway station, ½ m. from Calicut railway station, there are barracks for a small detachment of British troops kept there. To the centre is the Eurasian quarter, with a R.C. Church and a large tank, and an English Church, the Collector's Cutcherry and the Judge's Court, and near this are the remains of the old palace and a new palace. The old burial-ground, is close to the pier. Here is interred Henry Valentine Conolly, Collector and Magistrate of Malabar, who was murdered by Moplahs in September 1855. The oldest inscription that can now be read is to Richard Harrison, who died on 14th April 1717. Facing the sea are houses of the European residents, and the Custom House, and also the Club. The Collector's house is at East Hill, near the barracks of West Hill. There is a large and interesting temple in Talli, the Brahman quarter. There is a great appearance of cleanliness and comfort in the houses even of the very poor in Calicut, and the whole place is rendered very picturesque by the fine trees and groves of cocoanut palms in which it is embowered. The French have still a *loge* at Calicut. Cotton cloth, originally imported from this town, derives from its name of *calico*. The Basel Mission has a large textile factory in Calicut, as well as a college and a hospital.

At Calicut, on 11th May 1498, arrived Vasco da Gama, after a voyage of ten months and two days from Lisbon, of which the "*Os Lusíades*" of Camoens contain so interesting an account. It then contained many noble buildings, especially a Brahman temple. The native Raja,¹ the Tamurin, was called *Zamorin* by European writers. In 1509 the Marechal of Portugal, Don Fernando

¹ This is a variant of Zamuri, a corruption of Samūtiri, sea-lord, which has been anglicised as Zamorin.

² Commonly called Moplahs.

¹ Calicut and the adjoining West Coast were under the suzerainty of Vijayanagar (p. 516).

Coutinho, made an attack on Calicut with 3000 men, but was himself slain and his forces repulsed with great loss. In 1510 Albuquerque landed, burnt the town, and plundered the palace, but was eventually obliged to sail away with great loss. In 1513 the Raja concluded a peace with the Portuguese, and permitted them to build a fortified factory. In 1616 an English factory was established at Calicut. In 1695 Captain Kidd the pirate ravaged the port. In 1766 Hyder 'Ali invaded the country, and the Raja, finding that his offers of submission would be in vain, barricaded himself in his palace, and, setting fire to it, perished in the flames. Hyder 'Ali was soon called off to the war in Arcot, and the territory of the Raja of Calicut revolted, but was reconquered in 1773 by Mysore. In 1782 the victors were expelled by the English, and in 1789 Tipu Sultan overran the country, and laid it waste with fire and sword. Many women were hanged with their infants round their necks; others were trampled under the feet of elephants. The cocoanut and sandal trees were cut down, and the plantations of pepper were torn up by the roots. The town was almost entirely demolished, and the materials carried 6 m. to the S.E., to build a fort and town called *Farrukhabad*, "Fortunate City." The next year Tipu Sultan's general was totally defeated and taken prisoner with 900 of his men by the British, who captured the so-called "Fortunate City"; and in 1792 the whole territory was ceded to the English Government. Since that time the country has gradually recovered itself, and the trade of the city is now about 200 lakhs. The Zamorin now enjoys a political pension and has vast private estates, but no territorial jurisdiction. It is said that two pillars of the old palace in which da Gama

was received still remain. It is related that the Portuguese leader knelt down on his way to some Hindu idols, taking them for distorted images of Catholic saints, "Perhaps they may be devils," said one of the sailors. "No matter," said another, "I kneel before them and worship the true God."

451 m. Mahé (population about 10,000; named after M. Mahé de Labourdonnais when he captured it in 1725—originally called Mayyan) is a dependent territory of $2\frac{1}{2}$ sq. m., belonging to the French—their only possession on the W. coast, under a Chef de Service subordinate to Pondicherry.

It is finely situated on high ground overlooking the river, the entrance of which is closed by rocks. None but small craft can pass the bar in safety, and that only in fair weather; but the river is navigable for boats to a considerable distance inland. On a high hill some way off is seen the Mission House of the Basel missionaries at Chombala. From this hill there is a beautiful view of the wooded mountains of *Wynaad*. The French settlement at Mahé dates from 1725. It was taken by the English under Major Hector Munro in 1761. The Peace of Paris, in 1763, gave it back to the French, but it was retaken by the English in 1779, and in 1793 the British establishment at Tellicherry moved to Mahé; but, the place being restored to the French in 1817, the English officials returned to Tellicherry. Mahé, in common with the other French settlements in India, possesses all the institutions of a republic—manhood suffrage, vote by ballot, municipal and local councils, representation at the *Conseil Général*, which sits at Pondicherry, and in the Chambers in France by a senator and a deputy, who in practice are always residents in France. The Admin-

istrateur is appointed from home. He represents the central, and the *Maïre* the local, Government see p. 577). Excellent fishing.

457 m. Tellicherry (D.B. good; population 29,258). Anchorage, $1\frac{1}{4}$ m. from shore. Boat hire, R.1 per boat. The town lies in a most picturesque situation, backed by wooded hills, interspersed with valleys and watered by a fine river. There is a reef of rocks which forms a natural breakwater, within which is sufficient depth of water for a ship of 600 tons to ride at anchor. The value of the trade is about 100 lakhs per annum. In 1781 H.M. ship *Superb*, of seventy-four guns, was lost here. The fort is built on a rising ground close to the sea, and is about 40 ft. above its level. The whole of the N.W. side of the citadel is occupied by an old lofty building. The town contains good examples of the better native houses. The main bazar street is one of the most fascinating in Malabar, and the coast scenery is delightful: good bathing.

The *Cardamoms and Coffee of the Wynaad* are mostly exported from Tellicherry; the first are reckoned the best in the world. The seed ripens in September; excellent sandal-wood is also exported. The Wynaad is a plateau about 3000 ft. above sea-level in the E. of the Malabar District containing many tea and coffee estates. Coffee predominated till the end of the 19th century, but there is now far more tea. The area under tea is now 12,000 acres and is steadily increasing. Some gold-mining was done twenty to thirty years ago in the Devala tract, attached to the Nilgiris District, but the industry is now dead. The English factory at Tellicherry, which was established chiefly for the purchase of pepper and cardamoms, was first opened in 1683.

under orders from the Presidency of Surat. It was the first regular English factory on the Malabar coast. In 1708 the East India Company obtained from the Cheral Raja a grant of the fort. In 1782 Hyder 'Ali attacked the place, but was compelled by the vigorous sally of the garrison under Major Abington to raise the siege.

469 m. Cannanore has 28,957 inhabitants, and is a municipality and military station (D.B. good, and good hotel; also a Club, golf-course, and good sea-bathing). Anchorage 2 m. from shore. Boat hire, R.1 each passenger-boat. The Cantonment is on a jutting portion of land, which forms the N.W. side of the bay. Near the end of this is a promontory, on which stands the fort built by the Portuguese. This, since its acquisition by the English, has been improved and strengthened. The cliffs are from 30 ft. to 50 ft. high here, with piles of rocky boulders at their feet. The bungalows of the officials are most of them built on the edge of these cliffs, and enjoy a cool sea-breeze. Farther inland, and in the centre of the Cantonment, are the *Church*, magazine, and English burial-ground, contiguous to one another. The Portuguese Church, once the Portuguese factory, is close to the sea. The old Mappilla town, with some picturesque mosques, the Raja's palace and old business house, lie round the Bay to the S. of the Fort. The climate of Cannanore is mild, equable, and remarkably healthy. It has been used as a military sanatorium during the War. The Portuguese had a fort here as early as 1505. They were expelled by the Dutch, who subsequently sold the place to a Mappilla family, the head of which is called the 'Ali Raja (sea-lord), or Bibi, if a woman. His territory consisted of the town and a little of the adjacent country on the S., and he also claimed sover-

eighty over the Laccadive islands. These islands were sequestered for mismanagement, and were administered for over thirty years by the Collector of Malabar. Eventually in 1911 they were finally ceded, and the Raja was given a pension. In 1768 'Ali Raja, the then ruling Chief, readily submitted to Hyder 'Ali, and joined him on his invading Malabar. In the war with Tipu Sultan, in 1784, Cannanore was occupied by the English; but on the conclusion of peace next year it was restored to the Bibi. She again dallied with Tipu Sultan, and Cannanore was finally stormed and captured by General Abercromby in 1790.

552 m. Mangalore, the headquarters of the S. Kanara District (population 48,412), 12° 52' N., 74° 51' E. The place is separated from the sea by a backwater formed by the junction of two streams. In the rains these rivers, which flow round two sides of a peninsula on which the town of Mangalore stands, bring down a large quantity of water, and they are then navigable for boats of some burthen to a considerable distance inland. In the dry season there is but little current in either, except that caused by the influence of the tide, which flows to about 9 m. or 10 m. from their mouth. The banks of these rivers are high and steep, and are, where the soil permits, planted with cocoanut-trees or laid out in gardens and rice-fields. At the back of the present landing-place the great bazar commences, and stretches N. on the edge of the backwater about $\frac{1}{2}$ m. The building of the railway bridge appears to have had the effect of making the opening, which used to change its position, permanent in its present locality; and, in consequence, extensive dredging and other schemes of improvement are now under consideration. From the

hill on which the old lighthouse stands a remarkable view of the coast and the ghats can be had. The trade of the port has an annual value of 65 lakhs.

In ancient times Mangalore was a place of very great commerce. Ibn Batuta, in the middle of the 14th century, speaks of 4000 Muhammadan merchants as resident there. Forbes speaks of it, in 1772, as the principal seaport in the dominions of Hyder 'Ali, and well situated for commerce. Both Hyder 'Ali's and Tipu Sultan's ships of war were built at Mangalore of the fine teak produced on the slopes of the ghats.

Mangalore was most gallantly defended by Colonel Campbell, of the 42nd, from 6th May 1782 to 30th January 1783, with a garrison of 1850 men, of whom 412 were British soldiers, against Tipu Sultan's whole army (see Wilks, 2, 466-86), but in the end had to surrender.

The *Swiss Mission* at Mangalore is worthy of a visit. Various industries and trades are taught—printing, book-binding, carpentry, tile manufacture, etc. There are two colleges affiliated to the Madras University—the Government College and the *Jesuit College of St Aloysius*.

A modern traveller says: "We saw an exhibition of the products of this district. The description of Marco Polo will answer equally at the present day. He says: 'There is in this kingdom a great quantity of pepper, and ginger, and cinnamon, and of nuts of India. They also manufacture very delicate and beautiful buckrams. They also bring hither cloths of silk and gold, also gold and silver, cloves and spikenard, and other fine spices for which there is a demand here.'" Coffee is now the chief export from the place, the value being 48 lakhs annually.

There is an obelisk in the *Burial-*

ground to the memory of Brigadier-General Carnac, who died here, aged eighty-four, in 1806. He was second in command to Clive at the Battle of Plassey.

There are three places containing interesting Jain buildings, viz., Munbidri, Karkal, and Yenur. At Munbidri are remarkable Jain carvings: at Karkal and Yenur are colossal images, the third—there are only three in the world—being in the Mysore State. Mudbidri is 22 m. by a good road, Karkal is 18 m. further, and Yenur 16 m., but in a different direction, and not easily accessible. Karkal can be reached *via* Munbidri in about 5 hrs. by pony transit, if arrangements are made beforehand.

ROUTE 35.

MADRAS by South Indian Railway to Chingleput, Porto Novo, Chidambaram, Kumbakonam, Tanjore, Trichinopoly, Dindigal, Madura, Tinnevely, Quilon, and Tuticorin, for Colombo, with excursions to Gingee, Kodaikanal, Kuttalam, Cape Comorin, and Trivandrum, and by rail to Pondicherry, Negapatam, and Ramesvaram.

Madras to Tuticorin, 443 m., in 21½ hrs. Fares — Rs.28, Rs.14, Rs.5.

Madras. Egmore station (p. 555).

34 m. from Madras is Chingleput junction station (R.). At a D.B. about ¼ m. to the N.W., sleeping accommodation is available. A line of 39 m. runs to Arkonam junction station (R.), on the Madras Railway (Route 32 (b)). Chingleput can easily be visited by motor from Madras (see p. 540). If time allows of a halt at Chingleput the tour can be extended by visiting Mammallapuram, Tirukazhikundram, Sadras, Madurantakam, and other places of interest in the neighbourhood. 1 m. from Chingleput are the Pallava Caves of Vallam, with archaic inscriptions.

Chingleput is said to mean "the brick hamlet"—possibly because it was more substantially built than the grass-hut villages in the neighbourhood. It is the residence of the District Judge and of the Sub-Collector.

The Fort is of Vijayanagar origin, and was built in the 16th century, after the Battle of Talikota in 1565, when the power of the Vijayanagar kingdom was broken by the Muhammadan Kings of the Deccan. A slab imbedded upside down in one of the ramparts evidently relates some deed of Narasimha, who was the founder of the second Vijayanagar dynasty. Tradition states that the Fort was built by Timma Raja, an offshoot of the royal house, after their flight to Chandragiri. The grant of land to the English on which Fort St George is built was made by one of the Naiks of Chingleput, and was one of the last important acts of the Hindu Vijayanagar Princes.

The Fort is a typical Hindu structure, built after the model of Gingee, "the modern Troy." The walls are formed of roughly-dressed stone, hewn for the purpose by families of workmen, who affixed their marks to the stones. It is nearly a parallelogram, 400 yds. by 320 yds., and had an entrance in the shape of a

Greek fret, with a *mandapam* at the first turn, and at the next a temple dedicated to the monkey-god Anjaneya, who was a devotee to Kothandaramaswami (Rama with a bow), and to whom a temple was erected within the fort. This temple was removed in 1813 with the permission of the E.I. Company, and erected in the town where it stands at present. The Fort defences consist of broad ditches 60 ft. wide, with an outer and inner rampart 18 ft. high. At the S. end the corners were strengthened by bastions. To this day cannonballs of rounded granite are dug out of the ground, and were evidently propelled with the aid of 9-inch mortar guns. The barrels of the blunderbuss or musket with which the Naik's troops were armed form now the bars of the windows in the building used at first as a District jail in 1802, and afterwards as a dormitory of the reformatory school located in 1887 within the Fort.

When the sovereignty of the Vijayanagar house over the Carnatic was terminated, about the year 1639, by the Muhammadan King of Golconda, the Chingleput District was shortly afterwards taken possession of by Mir Jumla, the General of the King of Golconda, and, on the fall of Golconda in 1687, it passed with the rest of the Carnatic into the hands of the Mughal Emperors. The French acquired possession of the Chingleput fort in 1751, and it was taken by Clive in 1752. He created a battery 200 yds. on the S. side, and made a breach in the outer and inner ramparts. In two places the gun-shots are still visible. During the struggle for supremacy in the Carnatic between the French and English the latter found the Fort valuable as a base for keeping stores, as a place of confinement for French prisoners, and for harassing the rear of Lally's army, which was investing

Madras in 1758-9. In June 1758 it was temporarily evacuated after the reduction of Fort St David by the French, as the troops were required for Madras, but on the arrival of fresh troops from England Chingleput was reoccupied the same year.

Chingleput was handed over to the English as a *jagir* in 1760 by Muhammad 'Ali, Nawab of Arcot, for services rendered, and the grant was confirmed by the Mughal Emperor in 1763.

During the wars with Hyder Chingleput was once taken and twice unsuccessfully besieged. On the latter occasion it was relieved by Sir Eyre Coote in January 1781. Since then the fort has remained undisturbed in the hands of the English. It is now partially in ruins and undisturbed. The royal apartments, the granary, the barracks and armoury, have all been razed to the ground, but two old buildings still exist.

The *Raja Mahal* is also known as *Ther Mahal* (Ther=car), for the building is in the shape of a festival car attached to temples. Timma Raja built this "Ther Mahal" exactly in the form of the Conjeeveram car, and celebrated within the Chingleput Fort, on a smaller scale than that of Conjeeveram, the Brahma Oothsavam (festival) of Varada. Raja Swami, one of the presiding deities of the Vishnu temple, then situated within the Fort of Chingleput. On the seventh day the car (the Ther Mahal) in the Fort was ornamented on the outside with flags and bunting in the same way as the Conjeeveram car was decked, and, after the decking of the building with all the usual paraphernalia, the idol was brought from the Fort temple and placed on a seat on the second floor of the Ther Mahal building. It is the best architectural relic of the Vijayanagar line of Kings, and originally consisted of five storeys built in wedding-cake form; one

of the five was subsequently pulled down. The unusual height of the structure was due to the fact that the Ranis of the Palace desired to worship daily at 12 o'clock facing, with its towers in sight, the temple of Conjeeveram, the religious metropolis of the S., and thus avoid the personal discomfort to themselves of attendance at its shrine, especially on festival days. The time of the *puja* was announced to the Ranis by beating of drums from the tops of towers erected at intervals of 4 m. on the road from Conjeeveram. It was in the Ther Mahal that permission was given in 1639, by the Chieftain of Chingleput, to the messenger of Mr Francis Day to erect Fort St George. This quaint, solid structure is composed of a series of arcades of Moorish arches, surrounding a small inner dome-shaped room without a single piece of wood in its entire construction. The roof of the dome-shaped room in the first storey is decorated with plaster work, and was evidently used as a *mandapam* for the habitation of the household deities. The staircases were straight, were all located inside, and ran parallel to and above each other from one storey to another. The steps are extremely narrow, but they furnished sufficient foothold for the small feet of the Ranis. On a bright day the building dazzles the eye when the rays of the sun scintillate upon its lime-washed walls, once mistaken by an archaeologist for marble.

Another old building is the lower storey of the quarters, where the Deputy Superintendent of the Reformatory School (the model school of India) resides. The bungalow represents in stone the three periods which make up Indian history—the Hindu period, the Muhammadan period, and the English. The lower storey was first a Hindu temple, for the use of the Prime Minister of the Raja.

When the Fort was taken by the Muhammadans it was partly converted into a mosque, and the Muhammadan arch and the Hindu pillar exist side by side. The English period is represented by the upper storey, from the veranda of which a picturesque view is obtained, with the lake in front and the hills forming a background.

There are still frequent visitors to the Fort, but the object is more or less to see the Reformatory School. It is within easy reach of Madras by train or motor-car, and occasionally an amateur artist motors up to paint the beautiful colours in the waters of the tank—the Fort stands on the margin of a beautiful irrigation reservoir, or tank. There are numerous picturesque hills in the neighbourhood.

This town is the centre of the Tamil Missions of the Free Church of Scotland.

75 m. Tindivanam station (R., D.B.).

(1) 16 m. N.W. of this station, and 30 m. S.W. of Chingleput, is **Wandiwash** (Vandivasu), where Colonel Eyre Coote signally defeated Count Lally on 30th November 1759, and practically broke the French power in S. India.

(2) 18 m. W. of the Tindivanam station by road is **Gingee** (*Chenji*), the most famous fort in the Carnatic. The interest of the place is exclusively historical. The fortress comprises three strongly-fortified hills connected by long walls of circumvallation. The highest and most important hill, called Rajagiri, is about 500 ft. or 600 ft. high, and consists of a ridge terminating in an overhanging bluff, facing the S., and falling with a precipitous sweep to the plain on the N. On the summit of this bluff stands the citadel. On the S.W., where the crest of the ridge meets the base

of the bluff, a narrow and steep ravine probably gave a difficult means of access to the top, across which the Hindu engineer built three walls, each about 20 ft. or 25 ft. high, rising one behind the other. On the N. side the Fort is defended by a narrow chasm, artificially prolonged and deepened, a wooden bridge over it being the only means of ingress into the citadel through a narrow stone gateway facing the bridge.

Several ruins of fine buildings are situated inside the Fort. Of these the most remarkable are the two pagodas and the Kaliyana Mahal, the latter consisting of a square court surrounded by rooms for the ladies of the Governor's household. In the middle is a square tower of eight storeys, with a pyramidal roof.

Other objects of interest are—the great gun on the top of Rajagiri, which has the figures 7560 stamped on it; the Raja's bathing-stone, a large smooth slab of granite; and the *Prisoners' Well*, a very singular boulder about 15 ft. to 20 ft. high, with a natural hollow passing through it, poised on a rock near the Chakrakulam, and surmounted by a low, circular, brick wall.

Gingee was a stronghold of the Vijayanagar power, overthrown by the allied Muhammadan Kings of the Deccan in 1565 at Talikota. In 1677 the Fort fell to Sivaji by stratagem, and remained in Mahratta hands for twenty-one years. In 1690 the armies of the Delhi Emperor, under Zulfikar Khan, were despatched against Gingee with a view to the final extirpation of the Mahratta power: the Fort ultimately fell in 1698, and became the headquarters of the standing army in Arcot. In 1750 the French, under M. Bussy, captured it by a daring night surprise, and held it with an efficient garrison for eleven years, defeating one attack by the English in 1752.

98 m. Villupuram junction station (R., D.B.).

Branch N.W. to Vellore, Tirupati, and Renigunta (p. 478), and E. to Pondicherry. Adjoining the railway station there are locomotive workshops.

24 m. from Villupuram (122 m. from Madras) is Pondicherry (Puducheri) station * (46,738 inhabitants); long. $77^{\circ} 91'$, lat. $11^{\circ} 99'$, capital of the French establishments in India, which have an extent of 115 sq. m., and a population of 282,386. The means of locomotion here is a *pousse-pousse*, which is like a bath-chair, pushed by one or two men. The town, founded 1674 by François Martin, is divided by a canal into White¹ and Black Towns—the White Town next the sea. The *Governor's House*, a handsome building, is situated at the N. side of the *Place* within 300 yds. of the sea. The *Cathedral*, built 1855, called *Notre Dame des Anges*, has two lofty square towers. The *Pier* is 332 metres long. In front of the entrance to it, ranged in a semicircle, are eight pillars, 38 ft. high, of a greyish-blue stone, brought from Gingee (see above), which is 40 m. distant, said to have been given to M. Dupleix by the Governor of that place. On the third pillar on the left side, looking towards the sea, is an astronomical plan by some savants who were charged with fixing the longitude of Pondicherry. 50 yds. W. of the pier is the *Statue of Dupleix* (Governor 1741-54), on a pedestal formed of old fragments of temples brought from Gingee. At the S. end of the promenade is the *Hôtel de Ville*, a neat building, and E. of this, on the beach, is a battery of eight small guns. There is also a *Lighthouse*, which shows a light 89 ft. above the sea. The town

¹ La Ville Blanche.

of Pondicherry is lit by electricity. The territory of Pondicherry comprises 8 communes and 141 villages.

In 1672 Pondicherry, then a small village, was purchased by the French from the King of Bijapur, seventy-one years after the first arrival of French ships in India. In 1693 the Dutch took Pondicherry, but restored it in 1697 at the Peace of Ryswick. Under Dupleix it increased wonderfully. On the 26th of August 1748 Admiral Boscawen laid siege to it with an army of 6000 men, but was compelled to raise the siege on the 6th of October, with the loss of 1065 Europeans. The French garrison consisted of 1800 Europeans and 2000 sepoys. On the 29th of April 1758 M. Lally landed at Pondicherry and commenced a war, which ended ruinously for the French. In the beginning of July 1760 Colonel Coote, with 2000 Europeans and 6000 Indians, began to blockade Pondicherry. On the 9th of September the British army, having received reinforcements, carried the bound-hedge and two of the four redoubts which defended it. On the 27th November M. Lally, finding the garrison hard pressed by famine, expelled all the Indian inhabitants from the town—1400 in number. These, being driven back by the British, attempted to re-enter the fort, but were fired on by the French, and some of them killed. For eight days these persons in despair wandered between the lines of the two hostile armies, subsisting on the food which they had about them and the roots of grass. At last, finding Lally inexorable, the British suffered them to pass. The hopes of deliverance in the minds of the French were dispelled by the arrival of fresh British men-of-war from Ceylon and Madras, raising the blockading fleet again to eleven sail of the line. On 16th December 1760 the

town surrendered, as the garrison was reduced to 1100 men of the line fit for duty, and these enfeebled by famine and fatigue, and with but two days' provisions. In 1763 Pondicherry was restored to the French. On 9th August 1778 Sir Hector Munro, with an army of 10,500 men, of whom 1500 were Europeans, again laid siege to it. On the 10th Sir E. Vernon, with four ships, fought an indecisive battle in the roads with five French ships under M. Tronjolly, who some days after sailed off at night, and left the town to its fate. Pondicherry, after an obstinate defence, was surrendered in the middle of October by M. Bellecombe, the Governor, and shortly after the fortifications were destroyed. In 1783 it was re-transferred to the French, and on the 23rd of August 1793 retaken by the British. The Treaty of Amiens, 1802, restored it to its original masters, whereupon Bonaparte sent thither General de Caen, with seven other generals, 1400 regulars, a bodyguard of eighty horse, and £100,000 in specie, with a view, doubtless, to extensive operations in India. His intentions, however, whatever they may have been, were defeated by the reoccupation of Pondicherry by the British in 1803. The place was then attached to S. Arcot, and yielded a yearly revenue of Rs.45,000. When restored to the French in 1817 the population was only 25,000.

The French colony in India is composed of the five establishments of Pondicherry and Karikal on the Coromandel coast, Chander-nagore in Bengal, Yanaon on the Orissa coast, and Mahé on the Malabar coast, besides some small settlements known by the name of *loges*, of which the principal are at Surat, Patna, Kasimbazar, Dacca, Balasore, Masulipatam, and Calicut.

The population of the French possessions in India, according to

the last general census of 1915, is distributed as follows:—

	Area.	Persons.
Pondicherry	113 sq. m.	166,487
Karikal	43 ..	57,867
Chandernagore	3 ..	27,644
Yanaon	—	5,011
Mahé	26 ..	10,819

At the head of the Administration there is a Governor, residing at Pondicherry, assisted by a Privy Council, in which, under the Presidency of the Chief of the colony, seats are assigned to the General Secretary of the Government, the Procureur Général, the Chief of the Judicial Service, and two civil members, named every two years by decree of the President of the Republic. Administrators represent the Governor in the smaller possessions. The population includes about 1000 French and 2000 persons of mixed descent; by treaty engagement no French troops are maintained in the colonies, and no military works are erected in them. There is a High Court of Appeal, a handsome square building, at Pondicherry; and there are courts of first instance at Pondicherry, Karikal, and Chandernagore, and a Justice of the Peace at each of the five establishments. The Departments of native medical aid and public instruction are paid almost entirely from the local budget, which amounts to 17 lakhs of rupees. At Pondicherry there is a Colonial College, which had in 1915 483 pupils. The five establishments have, besides, 163 Government schools, attended by 9185 pupils, and 99 free schools, attended by 5772 pupils.

Pondicherry possesses five mills for cotton spinning and mechanical weaving, with 71,233 spindles and 1622 weaving-frames. The five mills employ 6190 workers inside the factories and 1189 workers outside. There is also

an iron foundry, employing 633 workers. The port of Pondicherry was visited during 1915 by 263 steamers, 399,131 tons, and by 45 sailing vessels of 2876 tons. The imports in 1915 valued 6,187,391 francs, and the exports 21,155,197 francs.

The colony enjoys all the political advantages of the metropolis, and is represented in the Senate and the Chamber of Deputies. It comprises in detail—

- (1) A *conseil général*, consisting of twenty-eight members, responsible for the local budget and every fiscal tax credited to this budget.
- (2) A *conseil local* for each establishment, responsible for attending to its various requirements.
- (3) Seventeen municipal councils, representing the interests of the communes. These 17 communes of the 5 establishments are distributed as follows: Pondicherry, 8 communes; Karikal, 6; Chandernagore, 1; Yanaon, 1; Mahé, 1.

All these councils are constituted by two groups of separate electors: (a) Europeans, descendants of Europeans, and similar persons; (b) the French natives. Each group has the right, in principle, to half the seats of the elected body. At the places where the first group is not represented by a minimum of twenty electors the whole number of seats is transferred to the second group; but the case generally occurs only among the municipal councils of the rural communes. The representative Deputy is elected by the whole electoral body of the two groups together; the representative Senator is elected by the members of the elected councils

together. The number of electors is distributed as follows :—

	First Group. 1st list.	Second Group. 2nd list.
Pondicherry	496	37,920
Karikal	77	10,888
Chandernagore	26	3,144
Yanaon	—	1,099
Mahé	44	1,773

For Chandernagore and Mahé, see pp. 97 and 569.

Karikal (lat. $10^{\circ} 55'$, long. $79^{\circ} 52'$) lies on a branch of the Cauvery 12 m. N. of Negapatam, and is reached by a line of railway from Peralam junction on the line from Mayaveram to Tiruvalur (p. 580). It contains 6 communes and 110 villages.

Tranquebar, 6 m. N. of Karikal, was a Danish settlement from 1616 to 1845, when it was acquired by the British Government with Serampore. Owing to the railway advantages which its rival Negapatam possesses, it is now a decaying place. The old fortress, known as the *Dansborg* ("Dan's Castle") was founded by Ove Gedde on behalf of the Danish E.I. Company in 1620. It has now been converted into a travellers' bungalow. A wooden tablet bearing a curious monogram of Christian V. of Denmark, dated 1677, which was formerly fixed in one of the rooms in the *Dansborg*, has been removed to the Government Museum at Madras. The first Protestant mission in India was founded at Tranquebar in 1706. There are several very old Churches in Tranquebar, and some interesting relics of earlier Christianity survive. The old town gateway is a quaint structure well worth inspecting.

125 m. Cuddalore New Town station. Population 56,574. The bungalow known as the "Garden-house," built in 1732-3, is the only Collector's residence in the

Presidency which is officially recognised as entitled to fly the Union Jack.

127 m. Cuddalore Old Town station (R.).

From the former station Fort St David can most conveniently be visited; it is also nearest to the public offices in the civil station and the D.B. At the Old Town station are the residences of a considerable number of Europeans, also the jail and Church, which is interesting on account of the old tombs in and about it. A small Church has recently been built in the New Town.

Fort St David,¹ $1\frac{1}{2}$ m. from New Town, is interesting on account of its history. From 1690, when it was purchased by the East India Company, it remained in the hands of the British until 1758, Clive being Governor in 1756, when it was besieged and taken, after many unsuccessful attempts, by the French, only to fall back into British hands at the Peace of 1783. All that now remains of the fort are the ditch, the foundations of the ramparts, and some masses of the fallen walls.

144 m. Porto Novo station. The town stands on the N. bank of the River Vellar, close to the sea, and is called by the Indians Mahmud Bandar and Farangipettai. The Portuguese settled here during the latter part of the 16th century, being the first Europeans who landed on the Coromandel coast. In 1678 the Dutch abandoned their factory at Porto Novo and Devanampatnam and went to Pulicat.

The chief historical recollection which attaches to Porto Novo is that, within 3 m. of it to the N.,

¹ Bernadotte, afterwards Marshal of France and King of Sweden, was captured in a sortie from the Fort during the siege of 1783.

close to the seashore, was fought one of the most important Indian battles of the last century. Sir Eyre Coote¹ had arrived at Porto Novo on the 19th of June 1781, after having been repulsed the day before in an attack on the fortified pagoda of Chidambaram, which he conducted in person. Hyder 'Ali was encouraged by the success of his troops on that occasion to hazard a battle, and he took up and fortified an advantageous position on the only road by which the British could advance to Cuddalore. The British force consisted of 2000 Europeans and 6000 sepoys, and Hyder 'Ali's forces of 40,000 Indians. Of the victory won by the former, 'Sir J. Malcolm speaks in the following terms: "If a moment was to be named when the existence of the British power depended upon its native troops, we should fix upon the Battle of Porto Novo. Driven to the seashore, attacked by an enemy exulting in recent success, confident in his numbers, and strong in the terror of his name, every circumstance combined that could dishearten the small body of men on whom the fate of the war depended. Not a heart shrank from the trial. Of the European battalions it is, of course, superfluous to speak, but all the native battalions appear from every account of the action to have been entitled to equal praise on this memorable occasion, and it is difficult to say whether they were most distinguished when suffering with a patient courage under a heavy cannonade, when receiving and repulsing the shock of the flower of Hyder's cavalry, or when attacking in their turn

the troops of that monarch, who, baffled in all his efforts, retreated from this field of anticipated conquest with the loss of his most celebrated commander and thousands of his bravest soldiers."

151 m. Chidambaram station (D.B. 1½ m. from station; population 21,327). Once the capital of the Chola kingdom.

The *Temples* at Chidambaram are the oldest in the S. of India, and portions of them are gems of Dravidian art. The principal temple is sacred to Siva, and is affirmed to have been erected, or at least embellished, by Hiranya Varna Chakravarti, the "golden-coloured Emperor," who is said to have been a leper, and to have originally borne the name of Swetavarma, the "white-coloured," on account of his leprosy, and to have come S. on a pilgrimage. He miraculously recovered at Chidambaram after taking a bath in the tank in the centre of the temple, and thereupon rebuilt or enlarged the temples. He is said to have brought 3000 Brahmans from the N. According to tradition, Vira Chola Raja (927-77 A.D.) saw the Sabhapati—i.e., Siva—dancing on the seashore with his wife, Parvati, and erected the Kanak Sabha, or golden shrine, in memory of the god, who is here called *Natesa* or *Nateswar*, "God of Dancing." The whole area is surrounded by two high walls, which contain thirty-two acres. The outer wall of all is 1800 ft. long from N. to S. and 1480 ft. from E. to W. Nearly in the centre of this vast space is a fine tank, 315 ft. by 180 ft. At the four points of the compass are four vast gopurams, those on the N. and S. being about 160 ft. high.

Near the tank is the Hall of 1000 Pillars, which is 340 ft. long and 190 ft. broad. Mr Fergusson (*Hist. of Ind. Arch.*, 1, 377) makes the number of pillars in the hall 984. This is one of the very rare

¹ Sir Eyre Coote first distinguished himself at Plassey; won the great victory of Wandiwash on 30th November 1759; took Pondicherry in December 1763; was made K.C.B. in 1771; was Commander-in-Chief in Bengal, 1779; was sent to Madras to check Hyder 'Ali in November 1780; and died, worn out by the campaign, on 28th April 1783.

instances in S. India where the so-called Hall of 1000 Pillars is almost furnished with that number.

The *Temple of Parvati*, known as Sivagamiyammam, the wife of Siva, is principally remarkable for its porch, which is of singular elegance. The roof is supported by bracketing shafts tied with transverse purlins till a space of only 9 ft. is left to be spanned. The outer enclosure in which this temple stands is very elaborate, with two storeys of pillars.

Adjoining this Temple of Parvati is one to *Subrahmanya*, the enclosure of which is 250 ft. by 305 ft. The images of a peacock and two elephants stand before it, then a portico with four pillars in front, with an inner court. Mr Fergusson assigns the end of the 17th or beginning of the 18th century as the date of this temple. There is another small one to Subrahmanya, and one to Ganesh in the corner of the great enclosure. There are also several small *mandapams* in other parts of the great enclosure, and one to the S. of the court of Parvati's Temple.

The principal temple to Siva is about 30 yds. S. of the tank. In the S.W. corner of this enclosure is a temple to Parvati, and in the centre of the S. side an idol of Nateswar. In the centre of all is the sanctuary, which consists of two parts. In this is the most sacred image of the dancing Siva, which is that of a naked giant with four arms, his right leg planted on the ground and his left lifted sideways. The roof of this building is covered with plates of gilt copper. There is also a tiny shrine, of which Mr Fergusson says: "The oldest thing now existing here is a little shrine in the innermost enclosure. A porch of fifty-six pillars about 8 ft. high, and most delicately carved, resting on a stylobate, ornamented with dancing figures, more graceful and more elegantly executed than any

others of their class, so far as I know, in S. India. At the sides are wheels and horses, the whole being intended to represent a car.

Whitewash and modern alterations have sadly disfigured this gem, but enough remains to show how exquisite, and consequently how ancient, it was." This pagoda was surrendered to the British in 1760 without a shot; but in 1781 Hyder 'Ali garrisoned it with 3000 men, and Sir Eyre Coote was repulsed from it with the loss of one gun.

174 m. from Madras is *Mayaveram* station. The town, 3 m. distant (27,121 inhabitants), is a place of pilgrimage in November. The Siva Pagoda has one large gopuram and one small one. To the W. of the Great Gopuram is a *Teppa Kulam* Tank.

From Mayaveram a line runs S. to (24 m.) Tiruvalur, on the line from Tanjore to Negapatam (p. 585) (54 m.), Mutupet and Pattukottai (71 m.), and Arantangi (93 m.).

The richly-endowed Temple of Sri Tyagarajaswami at Tiruvalur has a fine tank and car. It contrasts curiously with that at Tanjore in the principles on which it was designed, and serves to exemplify the mode in which, unfortunately, most Dravidian temples were aggregated. Mr Fergusson writes of it (*Ind. Arch.*, 1, 367):—

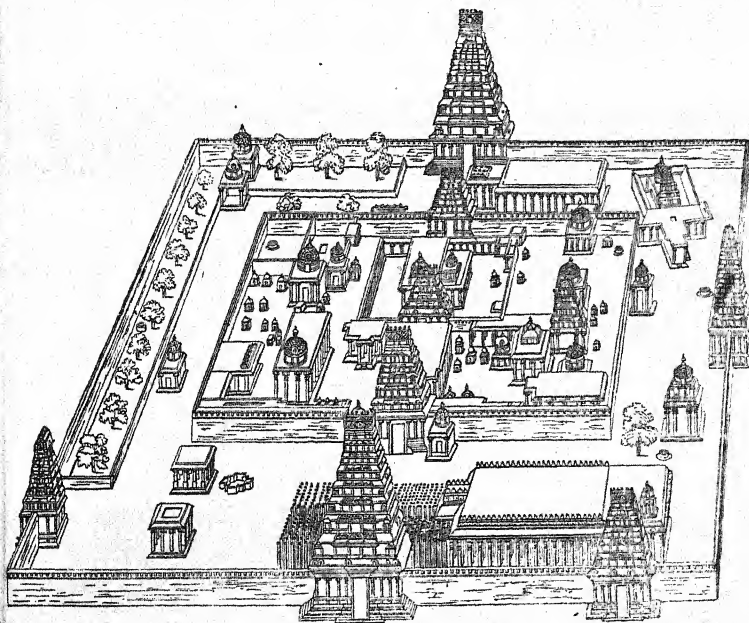
"The nucleus here was a small village temple. It is a double shrine, dedicated to Valmikeswara, or Siva, and his consort, standing in a cloistered court which measures 191 ft. by 156 ft. over all, and has one gopuram in front.

There is nothing to distinguish it from the ordinary temples found in every village. It, however, at some subsequent period became sacred or rich, and

a second or outer court was added, measuring 470 ft. each way, with two gopurams, higher than the original one, and containing within its walls numberless little shrines and porches. Additions were again made at some subsequent date, the whole being enclosed in a court 957 ft. by 726 ft., this time with five gopurams . . . and

available, it would have been completed to the typical extent.

"The general effect of such a design as this may be gathered from the woodcut bird's-eye view. As an artistic design, nothing can be worse. The gateways irregularly spaced in a great blank wall lose half their dignity from their positions; and the bathos of



Bird's-eye View, Temple of Tiruvalur.

several important shrines. When the last addition was made, it was intended to endow the temple with one of those great halls which were considered indispensable in temples of the first class. Generally they had, or were intended to have, 1000 columns; this one has only 807, and almost one-half of these mere posts, not fitted to carry a roof of any sort. There can, however, be very little doubt that, had time and money been

their decreasing in size (see p. 582) and elaboration as they approach the sanctuary is a mistake which nothing can redeem." (See also p. civ of the Introd.)

194 m. Kumbakonam station (R., D.B.), in the Tanjore District (population 64,647). The pagodas stand near the centre of the town, and about 1 m. from the station. The most interesting temples at Kumbakonam

are the Sarangapani, Banapurisvara, Ramasvami, Nagesvara, and the Kumbhesvara. The largest pagoda is dedicated to Vishnu, and the Great Gopuram here has eleven storeys.¹ The total height is 147 ft. A street arched over and 330 ft. long and 15 ft. broad, with shops on either side, leads to the Siva Pagoda, or Temple of Kumbeshwara.

To the E. side of the road from the station to the temples is the *Mahamokam Tank*—a fine tank, into which it is said the Ganges flows once in twelve years, the last occasion having been 6th March 1909. On these occasions so vast a concourse of people enter the water to bathe that the surface rises some inches. The tank has sixteen small but picturesque pagodas studding its banks. The principal one is on the N. side of the tank.

The *Government College* at Kumbakonam was formerly one of the leading educational institutions in India, and procured for the town the distinction of being called the Cambridge of Southern India.

225 m. Tanjore junction station (R., D.B.). [Branch 48 m. E. to Negapatam, see p. 585] Lat. 10° 47', long. 79° 10'. Population 60,341. The delta of the Cauvery River, near the head of which Tanjore stands, is considered the garden of Southern India. It carries a dense population, and is highly irrigated.

The Tanjore country was under the Cholas during the whole of their supremacy. Venkaji, the brother of Sivaji, the Great Mahratta, reduced Tanjore, proclaimed himself independent, and established a Mahratta dynasty, which lasted till 1799. The British first came into contact with the place, by their expedition in 1749, with a view to the restoration of a deposed Raja.

In 1758 it was attacked by the

French under Lally, who extorted large sums from the reigning Mahratta Raja. Colonel Joseph Smith captured the fort in 1773, and again in 1776 it was occupied by the English.

Raja Sarabhoji, by a treaty in 1779, ceded the dependent territory to the British, retaining only the capital and a small tract of country around, which also at last lapsed to the Government in 1855, on the death of the then ruler, Raja Sivaji, without legitimate male issue. "For ages Tanjore has been one of the chief political, literary, and religious centres of the South. Its monuments of Hindu art and early civilisation are of first importance."

The *Little Fort* contains the *Great Temple*, which, with the Palace of the Raja in the Great Fort and Schwartz's Church, are the sights of Tanjore. The two *Fort*s of Tanjore, which are much dismantled, are so connected that they may be almost regarded as one. On a rampart there is a huge cannon called Raja Gopal, 24 ft. in length, 10 ft. in its outer circumference, and 2 ft. in its bore, which has only once been fired.

The *Great Pagoda*.—The entrance is under a gopuram 90 ft. high. Then follow a passage 170 ft. long, and a second gopuram of smaller dimensions. There is a long inscription in Tamil characters of the 4th century on either side of the passage through the second gopuram. From this the outer enclosure of the temple is entered. It is 415 ft. by 800 ft., and is surrounded by cloister chapels, each containing a large lingam. Visitors may walk everywhere in the enclosure, but cannot enter the Great Temple or the halls of approach to it, though the sanctity of the temple was destroyed by its occupation on one occasion by the French. On the right is the *Yajnasala*, a place where sacrifices are offered, and

¹ See Fergusson's *Ind. Arch.*, 1, 395.

the Sabhapati Kovil, or Shrine of Siva, as the presiding god of an assembly. There are two *Bali-pirams*, or altars, close to the E. wall, one inside and one outside; and at about 40 ft. from the E. wall is a gigantic *Nandi* (bull) in black granite, a monolith 12 ft. 10 in. high and 16 ft. long, sculptured out of a solid block of rock, said to have been brought a distance of 400 m. It is daily anointed with oil, which makes it shine like the finest bronze. W. of this again is the *Kodi Maram*, or Great Temple, the most beautiful and effective of all Dravidian temples. A portico supported by three rows of pillars leads to two halls 75 ft. by 70 ft. each; beyond these is the adytum, 56 ft. by 54 ft., over which rises the vast tower of the *vimana*, 200 ft. high, including the great monolithic dome-shaped top and the *Sikra*, or spiked ornament. N.E. of the Great Tower is the Chandikasan Kovil, or shrine of the god who reports to the chief god the arrival of worshippers. W. of this, at the N.W. corner of the outer enclosure, is the *Subrahmanya Kovil*, Shrine of Kartikkeya, the son of Siva and deity of war, who is called Subrahmanya (from *su*, good, *brahman*, a Brahman) because he is so good to Brahmans and their especial protector. Mr Fergusson says of this wonderful shrine that it "is as exquisite a piece of decorative architecture as is to be found in the S. of India, and though small, almost divides our admiration with the temple itself" (*Ind. Arch.*, I, 365). It consists of a tower 55 ft. high, raised on a base 45 ft. sq., adorned with pillars and pilasters, which ornament is continued along a corridor 50 ft. long, communicating with a second building 50 ft. sq. to the E. Dr Burnell considers the Subrahmanya Temple to be not older than the commencement of the 16th century. Its beautiful carving seems to be in imitation of

wood. "Against one of its outer walls is placed a water-spout. The water which flows from it is poured over the idols inside, and is drunk by worshippers as a meritorious and purifying act."

The base of the grand temple—*i.e.*, the *vimana* and halls leading to it—is covered with inscriptions in the old Tamil of the 11th century, which Dr Burnell deciphered. The pyramidal tower over the *vimana* has evidently often been repaired in its upper part, where the images of gods and demons with which it is covered are now only of cement. This tower is only 38 ft. lower than the Kutb Minar at Delhi. Many picturesque views of it are obtained across the moat and walls of the fort, and it is well worth while making the whole circuit of these.

Dr Burnell says in his pamphlet, *The Great Temple of Tanjore*: "This temple is really the most remarkable of all the temples in the extreme S. of India; is one of the oldest; and as it has been preserved with little alteration, if not, perhaps, the largest, it is the best specimen of the style of architecture peculiar to India S. of Madras.

"This style arose under the Chola (or Tanjore) Kings in the 11th century A.D., when nearly all the great temples to Siva in S. India were built, and it continued in use in the 12th and 13th centuries, during which the great temples to Vishnu were erected. Up to the beginning of the 16th century these temples remained almost unchanged, but at that time all S. India became subject to the Kings of Vijayanagar, and one of these, named Krishnaraya (1509-30), rebuilt or added to most of the great temples of the S. The chief feature of the architecture of this later period is the construction of the enormous *gopurams* which are so conspicuous at Conjeeveram, Chidambaram, and Sri Rangam.

All these were built by Krishnaraya; they do not form part of the original style, but were intended as fortifications to protect the shrines from foreign invaders, and certain plunder and desecration, as the Hindus first discovered on the Muhammadan invasion of 1310 A.D."

The Palace of the Princess of Tanjore.—This building is in the Great Fort, lying E. of the Little Fort. The Palace is a vast building of masonry, and stands on the left of the street, which runs Northward through the fort; it was built about 1550 A.D. After passing through two quadrangles a third is entered, on the S. side of which is a building like a gopuram, 190 ft. high with eight storeys. It was once an armoury. Mr Fergusson writes (*Ind. Arch.*, 1, 416) of this tower: "As you approach Tanjore, you see two great *vimanas* not unlike each other in dimensions or outline, and at a distance can hardly distinguish which belongs to the great temple. On closer inspection, however, that of the Palace turns out to be made up of dumpy pilasters and fat balusters, and ill-designed mouldings of Italian architecture, mixed up with a few details of Indian art! a more curious and tasteless jumble can hardly be found in Calcutta or Lucknow." On the E. of the quadrangle is the *Telugu Darbar-room* of the Nayakkar Kings. On the sides of a platform of black granite are sculptured in alto-relievo Surs and Asurs fighting. On this platform stands a white marble statue, by Flaxman,¹ of Sarabhoji, the pupil of Schwartz, and the last Raja but one. He is standing with the palms of his hands joined as if in prayer, and he wears the curious triangular pointed cap used by the Tanjore

Princes in the last half-century of their rule. On the wall are a picture of Lord Pigot and numerous pictures of the Rajas, and a fine bust of Nelson, presented to the Raja by the Hon. Anne Seymour Damer, whose work it is. On the opposite side of the quadrangle is the *Library*, in which is a remarkable collection of 18,000 Sanskrit MSS., of which 8000 are written on palm leaves. This library is unique in India, and dates from the end of the 16th or beginning of the 17th century. In the *Maharatta Darbar*, which is in another quadrangle, is a large picture of Sivaji, the last Raja, with his chief secretary and his Diwan.

E. again lies *Schwartz's Church*, close to the Sivaganga Tank. Over the gate is the date 1777, and over the façade of the church is 1779 A.D. In the centre, opposite the communion-table, is a very fine group of figures in white marble, by Flaxman, representing the death of Schwartz. The aged missionary is extended on his bed, and on his left stands the Raja Sharfoji, his pupil, with two attendants, while on his right is the missionary Kohlmer, and near the bottom of the bed are four boys. The inscription contains a summary of his career. The small house N.W. of the church, and close to it, is said to have been Schwartz's habitation.

Next to the Sivaganga Tank is the *People's Park*. On a high bastion not far from this is a monster gun called the Raja Gopala, 24½ ft. long, and with a bore of 2½ ft. Other buildings of interest to the visitor at Tanjore are the Sangita Mahal, a miniature of the surviving Court of Tirumala Nayak's Palace in Madura; the Arsenal or Armoury; and the Clock-tower, so called on account of a curious device for marking the time, which was once fixed in it, but has now been removed, as it was found to be unsafe.

¹ The Tanjore *Gazetteer* of 1906 states that this marble statue was by Chantrey and not by Flaxman.

The Tanjore District was the scene of the earliest labours of Protestant missionaries in India. In 1706 the German missionaries Ziegenbalg and Plütschau established a Lutheran mission in the Danish settlement of Tranquebar, under the patronage of King Frederick IV. of Denmark; and in 1841 their establishments were taken over by the Leipzig Evangelical Lutheran Mission, which subsequently extended its operations into the District. The mission at Tanjore was founded in 1778 by the Rev. C. F. Schwartz, of the Tranquebar Mission, who some time previously had transferred his services to the Society for Promoting Christian Knowledge. The mission establishments at Tanjore were taken over in 1826 by the Society for the Propagation of the Gospel, which subsequently founded new stations in several parts of the District.

Roman Catholic missions in Tanjore date from the first half of the 17th century. Their churches and chapels are scattered over the whole District, but their principal seats are Negapatam, Velanganni (on the coast, 6 m. S. of Negapatam), Tanjore, Vallam, and Kumbakonam. The St Joseph's College, founded by French Jesuits at Negapatam in 1846, was removed to Trichinopoly in 1883.

Tanjore is famous for its silk, carpets, jewellery repoussé work, copper ware, and models in pith. The repoussé work, and the copper work inlaid with brass and silver *swami*, (or god) figures, are among the best in all India.

Negapatam (R.; population 60,168), 48 m. E. from Tanjore and 14 m. E. of Tiruvalur junction (p. 580), is a flourishing port doing a brisk trade (exports, £773,556; imports, £436,463) with the Straits Settlements and Coast Ports, and contains the large workshops of the S.I. Railway. It was one of

the earliest settlements of the Portuguese, was taken by the Dutch in 1660 and by the British in 1781. The Dutch Church and the old graves in the cemetery are interesting. Steamers belonging to the B.I.S.N. Company run once a week to Colombo *via* Pamban. Ramesvaram is now more conveniently reached by railway from Madura, as Colombo itself will probably be shortly (see p. 594). The line runs on from Negapatam to

53 m. Nagore.

248 m. Trichinopoly junction station (R.) * (branch W. to Erode, p. 560) (D.B.; population of the city, 123,512). The name is properly Tirusirapalli, or the "City of the Three-headed Demon." St John's Church, in which Bishop Reginald Heber is buried, is close to the station; the grave in the chancel is marked by a fine brass. The bath in which he accidentally met with his death in 1826 is near the house and court of the Judge of Trichinopoly. Near the same spot is a monument erected in memory of H. G. D. Harding, I.C.S., District and Sessions Judge, who was murdered by a fanatic, as he descended from his carriage to enter the Court on 22nd February 1916. The two historic masses of granite, the Golden Rock and the Fakir's Rock, are in the plain to the S. Close to the former is the Central Jail. Near it the French were defeated in two engagements in the second siege, which followed at once on the first, and the demand of the Mysore General that the town should be made over to him.

3 m. S.W. of Trichinopoly is the fortified pagoda which was occupied by the French in 1753, and recaptured by the British under Colonel Stringer Lawrence.

251 m. Trichinopoly Fort station on the *Erode Branch*. The Fort

has been dismantled, but this part of the town is still known as "the fort."

It will be remembered that it was to relieve the Siege of Trichinopoly—in which the English candidate for the Nawabship of Arcot, Muhammad 'Ali, was beleaguered by Chanda Sahib—that Clive seized the Fort of Arcot in 1751 (see p. 538).

In November 1753 the French made a night attack on the Fort, and succeeded in entering the outer line of fortifications at *Dalton's Battery* at the N.W. angle. Here there was a pit 30 ft. deep, into which many of the assailants fell. Their screams alarmed the garrison, who repelled them, and made 360 of the French prisoners. This portion of the old Fort is all that has been left standing. The moat that surrounded it has been filled in and planted as a boulevard.

On the N. side of the town, with a temple on it, is the *Rock*. At the foot of the W. side is a handsome *Teppa Kulam* tank with stone steps and a *mandapam*, or pavilion, in the centre. At the S.E. corner of this tank are a square corner-house, and adjoining it a house with a porch. In one of these Clive lived, but it is not certain in which. The house used as a hostel by the Jesuit Mission bears a medallion with an inscription stating that Robert (afterwards Lord) Clive occupied it, *circa* 1752. The most striking buildings on this side of the town are the St Joseph's College and the S.P.G. College, both first-grade institutions. The former is situated in the N.W. corner of the Fort, near the Main Guard Gate. It was founded by the Jesuit Mission in 1844 at Negapatam, and was transferred to Trichinopoly in 1883, when Father Sewell, who embraced the R.C. faith after his retirement from the army in 1877 with the rank of Major, became the Manager of the College.

It flourished under his management, and he was largely instrumental in the development of Trichinopoly as an educational centre. He died in Madras in 1915, aged 78, and was buried in the College Chapel. The S.P.G. College was the development of various schools founded in the 18th century by the Rev. C.F. Schwartz of the S.P.C.K. It is situated E. of the Main Guard Gate, and just opposite the *Teppa Kulam*. In 1762 Schwartz visited Trichinopoly and founded the first English Church in 1765-6. This is called Christ Church and stands opposite to the Caldwell Hostel on the way to Sri Rangam. Schwartz remained for many years in Trichinopoly and died in Tanjore in 1798, aged 72. The ascent of the Rock is by a covered passage which leads up to the top from the S.; and on the sides of the passage are stone elephants and pillars about 18 ft. high, which bear the stamp of Jain architecture. The pillars have carved capitals representing the lion of the S. and various figures of men and women. The frieze above is ornamented with carvings of animals. Flights of very steep steps, 290 in number, coloured white with red stripes, lead through this passage to the vestibule of a Saiva temple on the left, whence on certain days the images of the gods—viz., of Siva, Parvati, Ganesh, and Subrahmanya or Skanda—are carried in procession. In front of the temple is a huge Nandi bull covered with silver plates, which must be very valuable. The temple and the original Fort were built by a Madura Prince in 1660-70. The cave temples, cut into the rock on the left side of the steps, are worth visiting. The pillars in these temples bear archaic inscriptions in Pallava characters. The steps of the ascent were the scene of a terrible disaster in 1849. A vast crowd had assembled to worship Ganesh, here called Pilliar, or

the "Son." A panic arose, and in the crush which ensued 500 people were killed. From the temple the stairs turn E. and lead out on to the surface of the Rock, up which a rough approach has been cut to the *mandapam*, or pavilion, crowning the top, from which there is one of the finest panoramic views to be seen in the plains of India. On all sides the eye traverses the plain for 20 m. or 30 m. The height of the Rock is only 236 ft., but the plain is so flat that this height is sufficient to dominate a vast expanse of country. On the S. the most conspicuous object is the *Golden Rock*, about 100 ft. high. Carrying the eye to the S.E. of this rock, a patch of low, rocky ground is seen about 40 ft. high. This is *French Rocks*, about 2 m. from the fort. Within the town, distant only a few hundred yards, is the *Nawab's Palace*, which has been restored by Government, and is used for courts and public offices. To the N. of the Fort Rock is the broad shallow bed of the Cauvery, in which, except in the rains, there is but a narrow streak of water. Beyond is the *Island of Sri Rangam*, which the French occupied for several years, taking up their quarters in the two great temples, that of *Sri Rangam* to the W., and that of *Jambukeswar* to the E. Owing to dense groves the temples are not very distinctly seen. Beyond to the N. in the far distance rises a long line of hills. To the N.W. is the Tale Malai range, the greatest height of which is 1800 ft.; while due N. of the Fort Rock are the Kale Malai Hills, which attain 4000 ft.; and E. of these are the Pachai Malais (Green Hills), which in some parts rise to 2300 ft. Turning to the W. the old Chola capital of *Uraiyur* is seen, where there was once a Cantonment.

The most important local *Industries* are weaving and tobacco and cigar making. The cigars are

well known, though the so-called Trichinopoly cheroots come for the most part from Dindigal. The silver and gold manufactures are famous, the local gold and silver smiths being very successful in their filigree work.

About 2 m. N. from the Rock, on an island, 17 m. long and $1\frac{1}{2}$ m. broad, formed by a bifurcation of the River Cauvery, is the town of *Sri Rangam* (24,799 inhabitants). A bridge of thirty-two arches joins the mainland to the island on the S.

The Great Temple of Sri Rangam is about 1 m. N.W. of the bridge. The entrance is on the S. side of the temple, by a grand gateway, 48 ft. high, which appears to have been built as the base of a great gopuram. The sides of the passage are lined with pilasters and ornamented. The passage is about 100 ft. long, and the inner height, exclusive of the roof, is 43 ft. Vast monoliths have been used as uprights in the construction, some of them over 40 ft. high. The stones on the roof, laid horizontally, are also huge. The stone on the inside of the arch is 29 ft. 7 in. long, 4 ft. 5 in. broad, and about 8 ft. thick. From the terrace at the top of the gateway is seen the vast outer wall which encloses the gardens as well as the buildings of this the largest temple in India. The outer enclosure, 2475 ft. by 2880 ft., contains a bazar. Within this is a second wall 20 ft. high, enclosing the dwellings of the Brahmans in the service of the temple. The general design is marred by the fact that the buildings diminish in size and importance from the exterior to the innermost enclosure; and Mr Fergusson says: "If its principle of design could be reversed, it would be one of the finest temples

in the S. of India."¹ This view has been criticised by an authority who considers the arrangements entirely fitting, as the innermost shrine should naturally be the smallest in size. There are two great gopurams on the E. side, two smaller on the W., and three of a medium height on the S. Beyond the incomplete gopuram the road passes under a small *mandapam*, and then through a gopuram about 60 ft. high. The decoration of the gopurams is all painted, and the ceiling of this one represents the Varaha, or Boar Incarnation, of Vishnu, as well as other Avatars with multitudes of human beings adoring them. A second *mandapam* is then passed, and a second and third gopuram. Hard by is another enclosing wall, which surrounds the more sacred part, or real temple, beyond which is the *vimana*, or adytum, which none but Hindus are allowed to enter. At a third *mandapam* the jewels of the temple may be examined.

In the court round the central enclosure is the so-called *Hall of 1000 Pillars*. The actual number is about 940. (Mr Fergusson counted 960, but the number is now much reduced.) They are granite monoliths 18 ft. high, with pediments, slightly carved to the height of 3 ft., and they all have the plantain bracket at the top. The pillars of the front row looking N. represent men on rearing horses spearing tigers, the horses' feet being supported by the shields of men on foot beside them. The carved horses spring out from the pillars, all being carved from one block. The great gopuram on the N. is 152 ft. high. In the floor of the passage under this gopuram is a stone with a Kanarese inscription. Mr Fergusson is of opinion that the buildings were under construction

¹ See 1, 368 of his *Ind. Arch.*, where an illustration and a description of the temples will be found.

from the 10th century to 1600 A.D.¹

Temple of Jambukeswar.—In the S. of India temples are often found in pairs. If there is one dedicated to Vishnu, there will be one dedicated to Siva. So here, at about 1½ m. E. of the Great Temple of Sri Ranganam, is a smaller one sacred to Jambukeswar, or Siva, from *jambuka*, "rose-apple," and *iswar*, "lord," or Lord of India, Jambu being a division of the world—"India."

The Jambukeswar Temple has three courts, and is very much smaller than Sri Ranganam; it has been lately restored by Ramasami Chettiar. The plan, however, of the building is more artistic, and the main corridor and proportions are fine. On the right of the entrance is an upright stone 4 ft. high, with a long Tamil inscription. The first gopuram is also the gateway of entrance. The ceiling is painted with flowers of the lotus. Within the inner court is a remarkable *Teppa Kulam*, or tank, of spring water, with a pavilion in the centre. Round the S., the E., and the N. sides, run a corridor of two storeys supported by pillars. Beyond this is a second gopuram, and a third which forms part of the wall enclosing the adytum. Thence a broad corridor leads to the *vimana*. On the whole, this is a very fine temple, and well worth a visit. It is, no doubt, older than that of Sri Ranganam—probably about 1600 A.D.

The Anikuts, or dams.—About 9 m. to the W. of Trichinopoly the Cauvery separates into two branches, which enclose the island, the N. branch being called the *Coleroon* or *Kolidun*, and the S. the Cauvery. A dam was constructed across the Coleroon in 1836 to prevent the river deserting

¹ *Ind. Arch.*, 1, 373.

the S. arm, from which a number of branches irrigate Tanjore, the chief one being called the Vennar, which falls into the sea 20 m. S. of the spot where the Coleroon disembogues. The dam or Anikut, which was designed by Sir Arthur Cotton, R.E., consists of three parts, being broken by two islands. It is a brick wall 7 ft. high and 6 ft. thick, capped with stone, and is based on two rows of wells sunk 9 ft. below the river's bed. It is defended by an apron of cut stone from 21 ft. to 40 ft. broad, and has twenty-four sluices, which help to scour the bed. It controls the irrigation of about 600,000 acres. About 9 m. E. of Trichinopoly is the Grand Anikut, an ancient work, and below that is the Lower Anikut, also built in 1836.

One of the most interesting irrigation features of the District is the *Korambu* system. Above the Anikuts (*i.e.*, W. of them) irrigation channels take off flush with the river. They get a supply when the river is full. But when the river goes down *Korambus* are built—*i.e.*, temporary dams of brushwood, piles, earth, etc.—to catch up some water and divert it into the channels. If a fresh comes they are swept away and have to be put up again. They do not go *across* the river, nor do they follow a straight line; they are accommodated to the needs of the moment—*i.e.*, to catch up any water that may be catchable.

306 m. Dindigal station (R.), a municipal town (25,052 inhabitants) in the Madura Collectorate. It has a considerable tobacco manufacture. There are several tanneries, and a large cotton ginning and pressing factory under European management. The great rock on which the fort is built forms a conspicuous object; its summit is 1223 ft. above sea-level, 280 ft. above the plain. Its inaccessible sides were strongly fortified under the first Nayakkan Kings of

Madura, and for a long time it was the W. key of the Province of Madura. Dindigal was taken by the British from Tipu Sultan in 1781, restored to him in 1783, and finally ceded in 1792. Dindigal enjoys a mild and salubrious climate. A motor-car service connects it with Palni, 36 m. to the W.—a great place of pilgrimage.

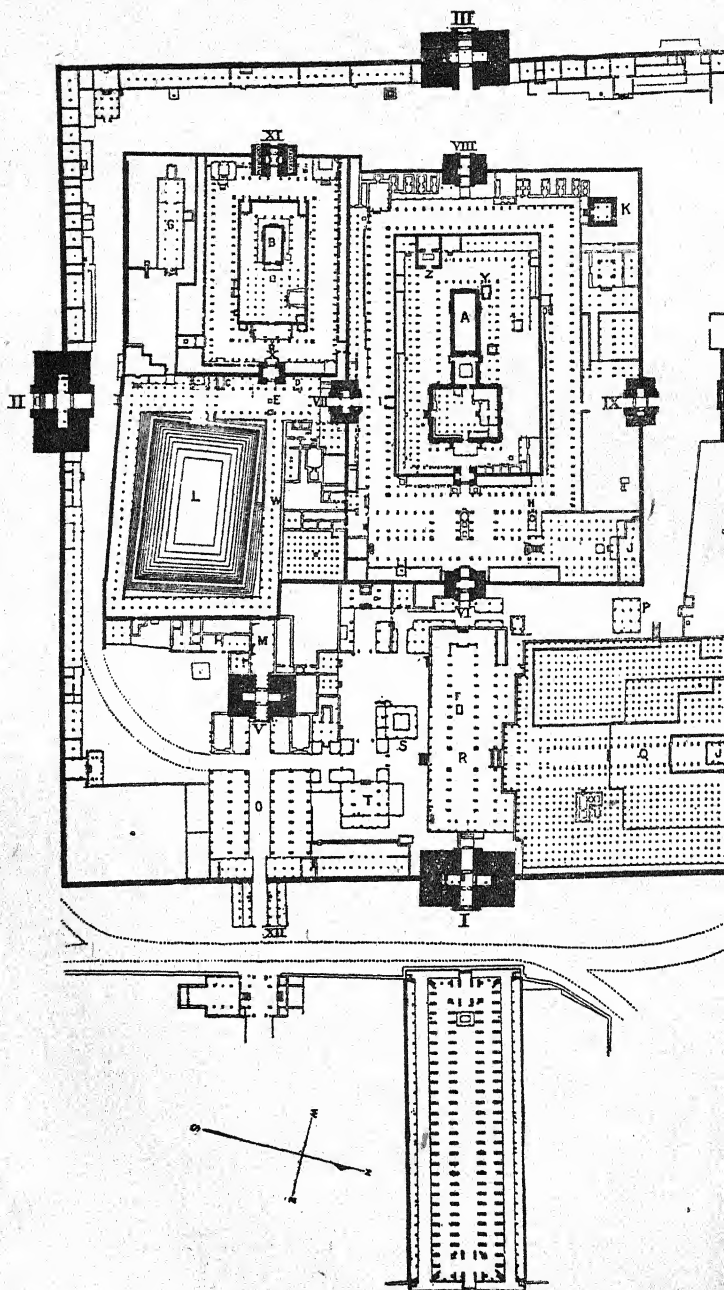
319 m. Ammayanayakkanur station, or Kodaikanal Road.* The distance to Kodaikanal (population 2906) is 50 m. by road. A motor service runs in the season. This station, which enjoys a growing popularity, is 7209 ft. above sea-level, and its climate is more even than that of Ootacamund. The scenery round it is not very picturesque, but there are places where the views of the low country and the Animalei Hills to the W. are beautiful past description. Game (both big and small) is obtainable on the hills, but is not easy to get. Nutmeg, cinnamon, and pepper-vine grow wild. Orange-trees, lime-trees, citron, and sago are cultivated. The observatory, moved from Madras in 1889, stands 7700 ft. above sea-level.

Ammayanayakkanur is also the station for the Travancore hills, and for the Periyar lake, 80 m.

344 m. Madura station (R., D.B.; * population 134,130), upon the *Vaigai* River, the capital of the Pandya Kings, one of whom sacked Anuradhapura c. 155 A.D. (p. 681). A Jesuit mission settled here in 1606. From Madura may be visited caverns and rock-cut Jaina figures at Anaimalei and Alagarmalai, headquarters of the Districts of Madura and Ramnad.

The Great Temple¹ (about $\frac{1}{2}$ m. E. of the railway station) forms a parallelogram about 847 ft.

¹ See Fergusson's *Ind. Arch.*, I, 391.



Plan of the Temple, Madura.

PLAN OF THE MADURA TEMPLE.

KEY TO THE PLAN.

- A Shrine of God Sundareswar.
- AA Pudu mandapam (Tirumala's Choultry).
- B Shrine of Goddess Minākshī-devī.
- C Small shrine of Ganesa.
- D Small shrine of Subrahmanya.
- E Vēdi or Altar.
- F Nandi Pavilion.
- G Javandīvara mandapam.
- H Navagraha or nine planets.
- I Large Ganesa.
- JJ Shrines of Natesvar.
- K Poet's College.
- L Tank of Golden Lilies.
- M Mudali Pillai mandapam.
- O Ashta Sakti hall.
- P 16 pillar mandapam.
- Q Thousand pillar mandapam.
- R Viravasantarāya mandapam.
- S Kātyāna Sundara mandapam.
- T Servaikaran mandapam.
- U Lingam.
- W Chitra mandapam.
- Y Ellamvatta-siddha.
- Z Madura Nāyaka temple.
- I-IV Four outer Gopurams.
- V Tiruvachi Gopuram.
- VI, VIII, IX Three Gopurams of the second Prākāra.
- X, XI, Gates to the Mipākshī prakārām.
- VII, Gate between the temples.
- XII, Ashta-Sakti mandapam.

by 729 ft., surrounded by nine gopurams, of which the largest is 152 ft. high. All the most beautiful portions of the temple as it now stands were built by Tirumala Nayak, who succeeded in 1623, and reigned gloriously thirty-six years. It consists of two parts—on the S. a temple to *Minakshi*, "the fish-eyed goddess," the consort of Siva; and on the N. one to Siva, here called *Sundareswar*, the legend being that the god under this form married the daughter of the local Pandya Chief, an event celebrated by the annual car festival. Owing to the facilities accorded for visiting all the outer courts and corridors up to the doors of the two adyta, this temple is perhaps the most interesting to visit of all the Hindu shrines of India, and gives one the most complete idea of Hindu ritual. It should be visited at night as well as in the daytime, the dark corridors with a lamp gleaming here and there being peculiarly wicked then. The entrance is only by the gate of Minakshi's Temple, through a painted corridor about 30 ft. long, which is called the Hall of the Eight Saktis, from eight statues of that goddess which form the supports of the roof on either side; in it various dealers ply their trade. On the right of the gate at the end of the hall is an image of Subrahmanya, or Kartikkeya, the Hindu Mars. On the left is an image of Ganesh. This gateway leads to a second stone corridor, with rows of pillars on either side, called the *Minakshi Nayaka Mandapam*, built by Minakshi Nayak, Diwan of the predecessor of Tirumala, where the elephants are kept. Some of the pillars have for capitals the curved plantain-flower bracket, but much of the detail is hidden by the stall shops. At the end of the second corridor, 166 ft. long, is a large door of brass, which has stands to hold many lamps that are lighted

at night. A third dark corridor, under a small gopuram, ends in one broader, with more light, which has three figures on either side, carved with spirit, and leads to a quadrangle with a *Teppa Kulam*. This tank is called *Swarnapushpakarini*, or *Pottamarai*, "Tank of the Golden Lilies." All round it runs an arcade. On the N. and E. sides the walls of this are painted with the representations of the most famous pagodas in India; from the S. side a very good view is obtained of the different towers of the gopurams. On the N.W. side is the belfry, with an American bell of fine tone. The corridor in front of the entrance to the temple is adorned with twelve very spirited figures, which form pillars on either side, six of them being the Yali, a name given to a strange monster which is the conventional lion of the S., sometimes represented with a long snout or proboscis. Between every two of them is a figure of one of the five Pandu brothers (see p. lxxii of the Introduction). First on the right is Yudhishtir, and opposite to him on the left is Arjan with his famous bow. Then comes Sahadeva on the right, and Nakula on the left. Then follows Bhima on the right with his club, and opposite to him, on the left, is the shrine of the goddess and the figure of a Dwarapalagam. From here a gopuram leads from the Minakshi Temple into that of Sundareswar, surrounded by a fine corridor. On the S. side of it is a Nandi hall, and eight steps lead into the *Aruvati Muvar*, the *Temple of the Saivite Saints*, in which are a very large number of statues of Hindu saints and gods. The jewel-house adjoining is opened for a fee of Rs.15. N.E. of the groups of statues are the chambers where the Vahanas, or vehicles, of Minakshi and Sundareswar are kept. There are two golden *palkis*, or litters, plated

with gold, and two with rods to support canopies. There are also vehicles plated with silver, such as a *Hamsa*, or goose, a *Nandi*, or bull.

In the N.E. corner is the most striking feature of the temple—the *Sahasrasthambha Mandapam*, or Hall of 1000 Pillars. There are in fact 997, but many are hid from view, as the intervals between them have been bricked up to form granaries to the temple. "There is a small shrine dedicated to the god Sabhapati, which occupies the space of fifteen columns, so the real number is only 985; but it is not their number but their marvellous elaboration that makes it the wonder of the place, and renders it in some respects more remarkable than the choultry (see below) about which so much has been said and written" (Ferguson, *Ind. Arch.*, 1, 392). This hall, whose sculptures surpass those of any other hall of its class, was built c. 1560 A.D. by Arianayakam Mudali, Minister of the Founder of the dynasty of the Nayakkans. He is represented on the left of the entrance sitting gracefully on a rearing horse. In the row behind him are some spirited figures of men and women, or male and female deities dancing.

Opposite the great gopuram is the *Pudhu*¹ *Mandapam*, or New Gallery, known as Tirumala's Choultry, and built by him for the presiding deity of the place, Sundareswar, who paid him a visit of ten days annually. This, had it been finished, would have surpassed in magnificence all the other buildings of this monarch; and as the date of its construction is known (1623-45), it forms a fixed point in the chronology of the style. The hall is 333 ft. long and 105 ft. broad, and has four rows of pillars supporting a flat

roof, and on either side of the centre corridor five pillars represent ten of the Nayakkan dynasty. Tirumala is distinguished by having a canopy over him and two figures at his back; the figure on the left is his wife, the Princess of Tanjore. On the left of the doorway is a singular group, representing one of the Nayaks shooting a wild boar and sows, according to the legend, which says that Siva commiserated the litter of little pigs, took them up in his arms, and, assuming the shape of the sow, suckled them. A portly figure, either that of Siva or the Nayak, is seen holding up the dozen little pigs. The hall is said to have cost a million sterling.

The *Great Raya Gopuram* is on the E. side of the hall; had it been completed in accordance with its foundations, it would have been by far the loftiest gopuram in all S. India.

$\frac{3}{4}$ m. from the temple to the S.E. is the **Palace of Tirumala Nayak**. The building, which looks modern, and has pillars of rough granite cased with beautiful chunam or cement supporting scalloped arches, has been restored, and is now utilised for public offices. The main entrance—a granite portico built in honour of Lord Napier and Ettrick, who first ordered the restoration—is on the E. side of the building. At each corner of the E. face of the Palace is a low tower. The Napier Gateway gives access to a quadrangle 252 ft. by 151 ft. On the E., N., and S. sides of this quadrangle is a corridor, the roof supported by arches resting on granite pillars. On the W. and opposite the main entrance stands the "Swarga Vilas," or Celestial Pavilion, formerly the throne-room of the Palace, now used as the Judge's Court. It is an arcaded octagon, covered by a dome 60 ft. in diameter and 70 ft. high. To the

¹ Also called the Vasanta Mandapam, as the god's visit to it was in the spring.

N. of this is the splendid hall, the two corresponding with the Diwan-i-Khas and Diwan-i-'Am of Muhammadan Palaces. The hall is 140 ft. long by 70 ft. wide, and its height to the centre of the roof is 70 ft.; but, what is more important than its dimensions, it possesses all the structural propriety and character of a Gothic building (see Fergusson's *Ind. Arch.*, I, 412-414). Fine as the hall is, the illustration in Fergusson's *Ind. Arch.*, taken from Daniell's drawing, utterly exaggerates the proportions and beauty of it. This old Palace now forms one of the finest public buildings in India.

The *English Church*, designed by Mr Chisholm, C.E., and built at the expense of Mr Fischer, a former well-known resident at Madura, stands in an open space in the middle of the town S.W. of the Great Temple.

On the N. side of the River Vaigai, N. of the city, and about 1 m. from the bridge (recently completed), is a curious building called the *Tamham*, built by Tirumala for exhibiting fights between wild beasts and gladiators. It is now the Collector's residence. N. again is the Civil Station. 3 m. E. of the station is the fine Vandiyur *Teppa Kulam* (or sacred tank, literally meaning the raft tank, with reference to the raft on which the god is taken from the great temple every year), enclosed by a granite parapet (1000 ft. sq.), and with a pretty temple in the middle. On the way is passed a garden with a very fine specimen of the *Ficus indica*. The main stem has been much mutilated, but is still 70 ft. in circumference. The ground shaded by this tree has a diameter of 180 ft. in every direction.

Ramnad District. The branch railway from Madura to (67 m.) Ramnad and (90 m.) Mandapam is connected with Pamban, on the island of Rameswaram, but

by a railway embankment and bridge across the Pamban channel. The line runs on from Pamban to (105 m.) Rameswaram, and 11 m. farther to Dhanuskodi. From here a steamer connects this route with Talai Manaar, 25 m. distant, from which Colombo is 207 m. (p. 684). This route from India to Ceylon, with its short sea-passage, is no doubt destined to supersede that *viâ* Tuticorin.

The Temple of Rameswaram, about 7 m. distant from Pamban, is one of the most venerated Hindu shrines in India, having been founded, according to tradition, by Rama himself, and therefore being associated with Rama's journey to Ceylon in search of Sita, and the *Ramayana* (p. lxxii, Introduction). For centuries it has been the object of pilgrimages from all parts of India. It is to their control of the passage from the mainland that the Chiefs of Ramnad owe their hereditary title of Setupati, "Lord of the Causeway." At Dhanuskodi works are in progress to connect the island of Ceylon, known as the Indo-Ceylon railway connection.

The island is to a great extent covered with *babul* (*Acacia arabica*) trees and by quaint umbrella-trees. It is inhabited principally by Brahmans, supported by the profits derived from the temples and by gifts made by pilgrims for purificating ceremonies. The Brahmans who live in Rameswaram depend largely upon the income they derive from the pilgrims, to whom they act as guides and priests.

The great Temple stands on rising ground above a fresh-water lake, about 3 m. in circumference, in the N. part of the island. It is built in a quadrangular enclosure 657 ft. broad by about 1000 ft. long, and is entered by a gateway 100 ft. high. With its majestic towers, its vast colonnades, and

its walls encrusted with carved work and statuary, it is a grand example of the Dravidian style. The best and oldest portion is built of a dark, hard limestone, to which there is nothing similar in the rest of the building. Local tradition asserts that this part was erected by the Vara Raja Sekkarar, of Kandy, with stone cut and polished in Ceylon, and that its cost was defrayed by the sea-port dues of all the coast towns during the year it was building. The massiveness of the workmanship (slabs 40 ft. long being used in the doorways and ceilings), and the wonderful pillared halls which surround the inner shrine are noticeable. The temple consists of three *praharams*. Excepting the *mulashanam*, or the innermost shrine, the other portions of the first and second *praharams* are in the course of renovation. The old limestone is replaced by black granite, and, unlike the old structure, ample provision is made for free light and air. It may take several years before the work is completed. The corridors of the outer or third *praharam* will remain untouched; and therefore when the work of renovation of the inner *praharams* is completed, the temple will exhibit the old and the modern style of architecture side by side, and in contrast.

Mr Fergusson says:¹ "If it were proposed to select one temple which should exhibit all the beauties of the Dravidian style in their greatest perfection, and at the same time exemplify all its characteristic defects of design, the choice would almost inevitably fall upon that of Rameswaram. In no other temple has the same amount of patient industry been exhibited as here; and in none, unfortunately, has that labour been so thrown away for want of a design appropriate to its display. . . . While the temple at Tanjore produces an effect greater than

is due to its mass or detail, this one, with double its dimensions and ten times its elaboration, produces no effect externally, and internally can only be seen in detail, so that the parts hardly in any instance aid one another in producing the effect aimed at." It remains to be seen to what extent the defects of design will be remedied by the work of renovation now in progress.

"The glory of this temple resides in its corridors. These extend to nearly 4000 ft. in length. The breadth varies from 17 ft. to 21 ft. of free floor space, and their height is apparently about 30 ft. from the floor to the centre of the roof. Each pillar or pier is compound, 12 ft. in height, standing on a platform 5 ft. from the floor, and richer and more elaborate in design than those of the Parvati porch at Chidambaram (p. 579), and are certainly more modern in date." But, unfortunately, several parts of these splendid corridors have been blocked up to locate the *vahanams*, or vehicles, the temple offices, the records, and for such other purposes. The glory is thus partly lost. The painting on the ceilings and the colonnades are either fading away or have faded altogether. It is understood that the present trustee of the temple has in view the restoration of the corridors to their full and ancient glory.

As the corridors run for the most part round open spaces, and have light admitted to them through the back walls, they have none of the mysterious half-light of those of Madura, and will perhaps strike some visitors as less impressive.

The temple, its ceremonies, and its attendant Brahmans are maintained from the revenue of seventy-two villages, yielding an annual income of about £7000, granted for the most part by former Rajas of the Ramnad *zamindari*, and by others, and

¹ *Ind. Arch.*, 1, 380.

from the offerings of pilgrims and devotees, and from other income amounting to Rs.3000. The *lingam*, which is supposed to have been placed here by Rama, is daily washed with Ganges water, which is afterwards sold, being bought by pilgrims; a stock of it is always kept ready.

The management of this historic and ancient institution has a chequered history. In 1882 the hereditary trustee of the Devasthanam was dismissed from office by the District Judge of Madura, and since then there have been temporary trustees or managers. Since 1910 a scheme of management has been sanctioned by the Court. Under the scheme the whole property, movable and immovable, belonging to the Devasthanam and the entire executive authority are vested in a trustee, who is aided by a committee of three members in matters such as the budget, etc. The term of office of the trustee, and of two out of the three members of the committee, is limited to five years. But they are eligible for reappointment. The third member of the committee is hereditary. The first trustee under the scheme is a retired Government official. Similar schemes of management have been or are in course of being introduced regarding other religious institutions of this Presidency. It is a unique feature of this Devasthanam that not one of its employees has any vested or *mirasi* right. The powers of appointment and removal, excepting that of the treasurer, and the control of the entire temple establishment, vest in the trustee in full, and in him alone.

401 m. from Madras is Koilpatti station, on the S. Indian Railway. The beautiful rock-cut Jain figures at Kalugumalai are 13 m. from Koilpatti, and are worth visiting.

425 m. Maniyachi junction (line to Tinnevely and Quilon—see p. 597).

443 m. Tuticorin station (Tuttukudi) * (Railway R. and D.B.), terminus of S. Indian Railway. Lat. $8^{\circ} 48'$, long. $78^{\circ} 11'$. A municipal and commercial town, exporting quantities of cotton, coffee, chillies, tea, cattle; value in 1915-16 of exports, £3,690,672, and of imports, £1,181,453 (population 40,185). The anchorage is 6 m. to 7 m. from the shore. Passengers are conveyed to and from the steamers of the B.I.S.N. Company in their steam launch. Fare, Rs. 5, an. 6 p. 6, with food, for Europeans; Rs. 3, an. 0 p. 6, without food, for Indians. The daily service to and from Colombo, 185 m. in connection with the S.I. Express from Madras, has been temporarily suspended on account of the War: steamers now ply twice a week each way. This sea-route will not be superseded by that *via* Madura, Ramesvaram, and Manaar (see pp. 594 and 684) without a struggle, if at all. There is an enormous passenger traffic of coolies by the present route.

The place was famous for its pearl fishery, which extended from Cape Comorin to the Pamban Channel. This was accurately described by Marco Polo, who noted that the fishermen paid Brahmans to charm away the sharks. Cæsar Frederick, who visited India 1563-81, recorded that the fishing began in March or April, and lasted fifty days. "It is never in the same spot during two consecutive years; but when the season approaches good divers are sent to examine where the greatest number of oysters are to be found, and when they have settled that point a village is built of stone opposite to it." The fishers and divers are mostly native Christians. Owing to the deepening of the Pamban Channel,

these banks no longer produce the pearl oysters in such remunerative quantities, but shank shells are still found and exported to Bengal. The fisheries are carried on at intervals under Government supervision.

The S.P.G. have a mission-house here. A site, near the seashore, for a D.B. at Tuticorin, has been selected.

Tuticorin was originally a Portuguese settlement, founded about 1540. In 1658 it was captured by the Dutch, and in 1782 by the British. It was restored to the Dutch in 1785, and again taken by the British in 1795. During the Poligar War of 1801 it was held for a short time by the Poligar of Panchalamkurichi, and was ceded to the Dutch in 1818. It was finally handed over to the English in 1825.

The old Dutch cemetery, containing several tombstones on which are carved armorial bearings and raised inscriptions, is worthy of a visit.

20 m. S. of Tuticorin, on the sea, lies the village (with D.B.) of **Trichendur** (motor service from Palamcottā : a railway under construction has been stopped), which contains a large and important temple dedicated to Subrahmanya, the god of war, and second son of Siva. The temple contains some excellent sculpture and several inscriptions. There is also a cave with rock-cut sculptures (on the list of monuments preserved).

19 m. from Maniyachi is **Tinnevely** (Tirunelveli) (population 44,805), on the left bank of the Tambrapurni River, and $1\frac{1}{2}$ m. from it. It is $3\frac{1}{2}$ m. from Palamcottā (population 44,909). A bridge of eleven arches of 60 ft. span each, erected by Sulochanam Mudeliar, connects the two places.

Tinnevely is the most Christian District in India. The S.P.G. and the C.M.S., established 1820, have

important stations at the headquarters and at Palamcottā, as have also the Jesuits. It was here that St Francis Xavier (1506-1552) began his preaching in India. This district has a long list of D.Bs. and R.Hs.

The *Temple* at Tinnevely, though, as Mr Fergusson says (*Ind. Arch.*, I, 392), "neither among the largest nor the most splendid of S. India, has the advantage of having been built on one plan and at one time, without subsequent alteration or change." It is, like the temple at Madura, divided into two parts, of which the S. half is dedicated to Parvati, the consort of Siva, and the N. to Siva himself. There are three gateways, or gopurams, to either half, those on the E. being the principal, and having porches outside them. In front on entering is an internal porch of large dimensions, on the right of which is a *Teppa Kulam*, and on the left a thousand-pillared hall, which runs nearly the whole breadth of the enclosure, and is 63 ft. broad. There are a hundred rows of pillars ten deep. The temple is deserving of a visit, and can easily be reached, as Tinnevely is but little out of the way of a traveller going to Tuticorin.

Palamcottā (D.B. furnished), $3\frac{1}{2}$ m. E. of Tinnevely, is a municipal town, with a population of 44,909, of whom 3424 are Christians. The old fort has been demolished.

Between the bridge over the Tambrapurni and the fort stands the Church of the C.M.S., the spire of which is 110 ft. high. The C.M.S. have several schools here.

The railway turns N.W. from Tinnevely, and runs past (50 m.) Shencottah, and through a dip in the ghats to Punalur (79 m.), and so to

107 m. **Quilon**—the Koilum of Marco Polo—on the W. coast of

the Travancore State, the ancient Kerala, which has an area of 7600 sq. m. and a population of 3,500,000. **Trivandrum**, * (population 63,000; D.B.), the capital of the State, lying 44 m. by road (public motor service) S.E. of Quilon, is the headquarters of the Resident. No less than 20 per cent. of the population of the State is Christian, 238,000 being members of the old Syrian Church. The present Chief of the State is H.H. Maharaja Sir Rama Varma, G.C.S.I. The ancient custom of descent through the female line still prevails, both in the royal family and in the State generally. The fort at Trivandrum (Tiruvananthapuram) contains, besides the fine Palace of the Maharaja, an old temple of Vishnu, known as the Padmanabha. The palace may generally be visited on application to the Private Secretary to the Maharaja. There is an observatory at the capital, and a good museum and a fine public garden. The attack in 1789 by Tipu Sultan, on the Travancore lines from the island of Vypeen, N. of British Cochin, to the foot of the ghats, led to the great Mysore War of 1789-92.

The new Quilon-Trivandrum railway is approaching completion.

38 m. N.W. of Tinnevely is **Kuttalam** (D.B.), resorted to by European residents and even more by Indians of position, from Madras and other distant places. It is not very elevated, but the S.W. winds pass over it through a chasm in the W. ghats, and bring with them coolness and moisture so that the temperature of this favoured spot is from 10° to 15° lower than that of the plains beyond, and it is particularly enjoyable in June, July, and August. Close to the bungalows there are three falls in the channel of the Chittar River, the lowest cataract having a plunge of 200 ft., but being broken midway. The

average temperature of the water is from 72° to 75° F., and invalids derive great benefit from bathing in it. The bathing-place is under a fine shelving rock, which affords the most delightful shower-bath possible. The scenery is strikingly picturesque, being a happy mixture of bold rocks and umbrageous woods.

There is also a D.B. at Nannagaram, close to Kuttalam.

From Palamcott to **Papanasham** (*papa*, "sin," *nasham*, "effacing") is 29 m. Here, near a pagoda, the Tambrapurni River takes its last fall from the hills to the level country. The height is only 80 ft., but the body of water is greater than at Kuttalam.

From Palamcott to Cape Comorin is a distance of about 50 m. along a fair unmetalled road. If arrangements are made beforehand, the journey can easily be done in less than 15 hrs.; the night being spent in the bullock-coach, which is the only means of conveyance procurable.

From Palamcott there is now a motor-service to Nagarcoil, 8 m. from Cape Comorin. The Travancore State has a guest-house at Cape Comorin.

Cape Comorin (lat. 8° 4', long. 77° 35')—the "*κορυφαία ακρόν*," of Ptolemy and "*Comori*" of Marco Polo—is named from the temple of Kumari (the Virgin, an attribute of Durga) built at the Southernmost point of the Indian peninsula. The temple and village, standing on rocks, and the long sandy promontory, backed by groves of palms, are very picturesque; and there are considerable remains of fortifications a few miles N. of the temple. There is a D.B. (second class).

ROUTE 36.

MADRAS to MAMALLAPURAM, or the Seven Pagodas, by canal, or by rail and road.

A highly interesting expedition from Madras is to Mamallapuram (Mahabalipuram), D.B. (*the city of great Bali*—see note, p. 602), or the Seven Pagodas, one of the most remarkable places in India.¹

It is about 35 m. S., six of which can best be done in a carriage to Guindy Bridge, where the Buckingham Canal is reached. (The canal is shallow near Madras, and a boat is continually grounding). A boat must be engaged beforehand through one of the hotels or agents: the cost is about Rs.7. If more than one person is going, another boat must be engaged for the servants. The boatmen tow the boat, and the journey is done in from 12 to 14 hrs. Another route is by Jhatkā (fare, Rs.2½) or by motor-car, on a good road, from Chingleput through Tirukalikunram to the canal, which is continuous, with a backwater, and should be crossed by boat, the water being waist-deep. There is a furnished two-roomed D.B. at Mamallapuram: no servants except the watchman, and supplies are difficult to get. There is excellent sea-bathing near the shore-temple, but care must be taken not to venture too far out. Arrangements for crossing the canal and backwater may possibly be made by the D.B. watchman,

¹ A full description of the excavations and carvings at Mamallapuram will be found in the *Cave Temples of India*, by Mr Fergusson and Dr Burgess, and in the collection of papers published by Captain M. W. Carr in 1869. See also Fergusson's *Ind. Arch.*, i, 171, 337-342.

if he is addressed in advance, but it is not his duty to make arrangements.

The popular name of the Seven Pagodas is Mavalavaram, or Mahabalipuram (a Sanskritised form of MAMALLAPURAM), which was believed to connect the town with the demon Mahabali, overpowered by god Vishnu in his *vamana-avatara*, or dwarf-incarnation; but the derivation of the name from the demon Bali is now given up. It has been suggested that the village owes its existence to the Banas, who claim their descent from the demon Mahabali, or Mahabali-chakravartin). There is, however, no evidence to show that the Banas extended their dominions so far. But in ancient Chola inscriptions found at the Seven Pagodas the name of the place is Mamallapuram; this is evidently a corruption of Mahamallapuram, meaning the "city or town of Mahamalla," which occurs as a surname of the Pallava King Narasimhavarman I. in a mutilated record at Badami in the Bombay Presidency, which he claims to have captured. The earliest inscriptions on the *Rathis* at the Seven Pagodas, in the opinion of Professor Hultzsch, are *birudas* of a King named Narasimha. It is thus not unlikely that Mahamallapuram, or Mavalavaram, was the original name of the village, and that it was founded and named after himself by the Pallava King Narasimhavarman, the contemporary and opponent of the Chalukya Pulakesin II. (A.D. 609-42).

3 m. N. of Balipitham, the landing-place for the modern village of Mamallapuram, is Saluvan Kuppan, with two cave temples. One of these is usually filled with drift-sand. The other is quaintly carved with nine lions' heads round the cells, and has two elephants' heads under miniature cells to the right of it. Running S. from Balipitham, and between

the canal and the sea, distant nearly $1\frac{1}{2}$ m., is a low granite ridge rising about 120 ft. above the plain in its highest part. Upon this ridge are various excavations and carvings; on the E. face of it is a famous relief of the so-called Penance of Arjan, and 700 yds. beyond the S. extremity of it are the five monolithic temples called the *Raths*, all works, it is believed, of the Pallavas (p. 541), and dating from the 7th century A.D. The modern village lies E. of the great relief, and the old temple lies beyond it again on the seashore. The traveller can proceed in his boat to opposite the *Raths*, or by foot from Balipitham along the top of the ridge, or below its Eastern side, as he may feel disposed. Every one will probably prefer to visit the *Raths* first, as they are absolutely unique in the whole of India.

These numerous monolithic monuments known as the *Raths* may be assigned with considerable certainty to the Pallavas. The Dharmaraja Rath, the Ganesa Temple, the Dharmaraja-mandapa and the Ramanuja-mandapa bear inscriptions which prove beyond doubt that they were all excavated by Pallava Kings. The Ganesa Temple and the Dharmaraja-mandapa are called *Atyantakama Pallavesvara-griha*. The same name is engraved on the outside of the third storey of the Dharmaraja Rath. Perhaps the last was completed by Atyantakama, who might have constructed the remaining *Raths* as well as the Ganesa Temple and the Dharmaraja-mandapa. The Saluvanguppam Cave, situated about $\frac{1}{2}$ m. N. of Mamallapuram, was excavated by Atiranachanda-Pallava, and was accordingly called Atiranachanda-Pallavesvara-griha. The identity of Atyantakama and Atiranachanda with any of the Kings known from the copper-plate grants remains to be estab-

lished by future researches. The Chola inscriptions in the Shore Temple at the Seven Pagodas mention three shrines at Mamallapuram—viz., Kshatriyasimha-Pallava-Isvara, Rajasimha-Pallava-Isvara and Pallikondaruliya-deva, which were apparently situated in the temple called Jalasayana—i.e., the Shore Temple. Kshatriyasimha-Pallava-Isvara was in all probability the ancient name of the principal shrine in the Shore Temple. Rajasimha-Pallava-Isvara might be the name of the smaller shrine in the same temple, while Pallikondaruliya probably denotes the shrine connected with the larger temple, where a large mutilated statue of the god Vishnu is lying. It is probable that the Pallava King Rajasimha built the smaller of the two shrines which go by the name of the Shore Temple. It is also possible that Kshatriyasimha was another name of the same King. In this case the whole of the Shore Temple must have been built by the Pallava King Rajasimha, who constructed the Kailasanatha Temple at Kanchipuram about the beginning of the 8th century A.D. Besides these there are a pretty large number of caves at the Seven Pagodas which bear no inscriptions, but which may also be assigned to the Pallava period.

The most Northerly of the *Raths* is called after Draupadi, the wife of the five Pandavas (see p. lxxii, Introduction). It is the smallest of all, measuring only 11 ft. sq., and has a pointed roof, like that of a thatched hut, rising 18 ft. from the ground, and once crowned by a stone finial. The image of a goddess carved inside the shrine is popularly explained as Draupadi, but more probably represents Durga. At her feet are two kneeling figures, one of which is shown in the act of making an offering of his hair. W. of this Rath are an elephant and a lion

carved out of single blocks of stone, and E. of it is a *Nandi* bull. These animals are the vehicles (*vāhanas*) of the thunder-god Indra, the goddess Durga, and Siva, and were presumably intended to be placed in front of the respective shrines. The second Rath, popularly named after Arjan, was probably in reality a temple dedicated to Indra whose effigy is shown in a niche in the back wall. Like the fourth named after Dharmarāja (or Yudhishtir) it is a copy of a terraced Buddhist *Vihāra*. The so-called Dharmarāja is in reality a Siva temple built by the Pallava king Narasimhavarman who reigned in the first half of the 7th century. The first, which is three-storeyed, measures 11 ft. sq. and is 20 ft. high; the cell in the interior is only partly excavated. The second measures nearly 27 ft. by 29 ft., and is 35 ft. high; it has four storeys, three with simulated cells round them, and the fourth of a dome-shape, reminding one of the crowning cupola of the Great Temple at Tanjore. In each round window decorating the cells is a head as of a monk looking out of it. The basement storey has round it columns of the Elephanta type (p. 22), with lions at their base; the excavation of the other two storeys has been commenced only. Between these two Rathas is that of Bhima, and W. of this, and outside the line of the other four, the Rath of Sahadeva and Nakula. The former is the largest of all, measuring 48 ft. by 25 ft., and rising 26 ft. from the ground. Only part of the hall has been excavated, the pillars having cushion capitals and lion bases (see above). The carved roof of the upper storey closely simulates the wooden form of a free structure of the kind. The fifth Rath is smaller again, 18 ft. by 11 ft. by 16 ft. high; it has an apsidal end on the S. side, and is intended to represent a Chaitya (p. ci Introd.).

At the N. end is a porch with two pillars in front of a cell, beyond which excavation of the Chaitya never proceeded. Simulated cells are represented on the terraces of this Rath also. Each of these works is carved out of a single mass of stone, and probably these masses once formed a detached continuous outcrop of the rocky ridge.

Proceeding N. from the Rathas to the Southern extremity of the ridge, there will be found on the isolated rocks near the E. corner a representation of a penance of Arjan, and on the W. side the Varāhaswami Temple, used for Hindu worship and not accessible. Between these, rather farther to the N., is the Yamapuri or Mahishamardini *mandapam*, a cave 33 ft. long and 15 ft. deep, with representations of the combat between Durga, wife of Siva, and the buffalo-headed demon, and of Vishnu reclining on the Shesh Snake; at the back of the cave are three cells. Farther N. again, beyond various incomplete excavations and the Ramanujya *mandapam*, a cave 18 ft. by 10 ft., with two pillars resting on lions' heads, are the excavations known locally as the throne or couch of the Dharmarāja, and the bath or vat of Draupadi, nearly opposite the fine gateway of the Vishnu Temple, known as the Rayula Gopuram, which was begun about the 12th century, on the E. side of the ridge above the great bas-relief, but was left only begun. To the N. of the gopuram is a very graceful monolithic temple, called after Ganesha, measuring 19 ft. by 11 ft., and rising 28 ft. from the rock. It has three storeys, the two lower with simulated cells, and the carved roof of the topmost carrying a row of finials; the pillars of the base are of very slender and wooden form. N.W. of this, and facing W., is a cave, 19½ ft. by 9½ ft., with bold representations of the Varaha, or

Boar incarnation¹ of (1) Vishnu; (2) elephants pouring water over Lakshmi; (3) Durga; (4) Mahabali and the Dwarf (Vamana) incarnation. Farther N. again is one cave on the W. side and another on the E. side known as the *Isvara mandapam*, containing three shrines with statues of the Hindu Triad; there is a large stone bowl in front of the cave, and at the back of it a relief of elephants, and a monkey and a peacock. Just beyond the N. end of the ridge, and near the hamlet of Pillaiyan Kovil, is a life-like sculpture of three monkeys in the round.

Turning S. again from this point, below the E. face of the ridge the great bas-relief 90 ft. long and 30 ft. high will be found at the back of the village temple, also probably dating from the 7th century. The N. half of the relief is occupied below by two life-size full-grown elephants and four small ones, and above by a crowd of figures hurrying to the centre. In the rift between this and the Southern face is a

statue of the Nag Raja, overshadowed by a seven-hooded serpent, and of his wife below him, with other serpent-crowned figures and animals. On the Southern face is Siva with an ascetic, from whom the relief is named the Penance of Arjan, on his left, and a large number of dwarfs, flying figures, human beings, and animals, including lions, monkeys, hares, deer, and birds, round him. The relief is very picturesque and interesting, and is unique in all India. S. of this is a large unfinished cave known as the *mandapam* of the Pancha Pandavas, with two rows of pillars and models of cells on the façade; and farther again and not far above the S.E. corner of the ridge is the Krishna *mandapam*, of later date than any of the other excavations, supported by twelve columns in four rows, and containing at the back a sculptured relief of Krishna holding up the mountain of Gobardhan (p. 225). The central figure of a cow being milked is very natural.

A path leads from the bas-relief past a fine tank to the seashore temple, dating from the 8th century, and being one of the oldest Dravidian temples extant. It is in the form of a five-storeyed vihara about 50 ft. high and 60 ft. at the base (*Ind. Arch.*, 1, 362). Inside the temple is a fallen lingam, and inside a vestibule on the W. of it is a recumbent figure of Vishnu, 11 ft. long; 75 ft. distant in the sea are the remains of a *dipa stambha*, or lamp pillar. S. of the temple are two rocks with recesses surrounded by lions' heads excavated on their W. side. In front of these is a stone lion, and at the back an elephant's head and a horse.

Sadras (D.B. fairly good), an old Dutch settlement, lies on the canal 3 m. S. of Mamallapuram, but hardly merits a visit. The place,

¹ The representation of the *Varaha* incarnation is fairly well done, but unfinished. The central figure is the four-armed Vishnu with a huge boar's head who lifts up the Earth Goddess and places his right leg on the head of a snake-hooded figure issuing from the waves. The latter is the giant Hiranyaksha, "Golden eye," who had carried off the earth into the infinite abyss. Vishnu with the head of a boar, "pursued and slew him and saved the Earth." The representation of the *vamana-avatara*, or dwarf-incarnation, is very spirited. Vishnu, dilated to an immense size, places one foot on the earth, and lifts another to the sky. The god has eight arms, with which he holds a sword, a quail, a shield, a bow, and a lotus, and with one he points. The other two are indistinct. Worshippers or attendants are at his feet, and other figures appear in the skies. One to the W. has the head of a dog. The legend is that when Bali became Ruler over the whole earth Vishnu approached him in the shape of a dwarf, and asked for so much space as he could cover in three steps. Bali granted this modest request, whereupon Vishnu dilated to immense proportions and planted one foot on earth, one on the sky, and with a third thrust Bali down to Hell.

like Masulipatam, was once famous for its printed cottons. It may be reached by canal boat from Guindy Bridge near Madras, or by motor from Chingleput. The ruined Dutch fort and the old Dutch cemetery are the principal objects of interest.

At **Tirukalikunram** the road from Chingleput branches, the N. branch going to the Seven Pagodas, the S. one to Sadras. On the latter are two very fine temples—one on the hill and one in the

village—a spacious and beautiful tank with steps all round, and a rock-cut temple, on whose pillars are many Dutch signatures. The temple in the village is full of ancient inscriptions. Tirukalikunram, "the sacred hill of the kites," or Pakshitirtham, "the sacred place of the birds," is a place of pilgrimage, and hundreds of pilgrims flock almost every day to see two sacred kites sumptuously fed on the top of the hill, from the hands of a priest, at the temple's expense.

BURMA

INTRODUCTION

(The portion of the Handbook relating to Burma was originally written by the late Sir E. S. Symes, K.C.I.E.)

General Description.—The Province of Burma lies to the E. of the Bay of Bengal, and covers a range of country stretching from the 10th to about the 28th parallel of latitude. It is bounded on the N. and N.E. by China; on the N.W. by Bengal, Assam, and the feudatory State of Manipur; and on the W. and S.W. by the sea. To the S.E. lies the kingdom of Siam. The extreme length of the Province is approximately 1200 m., and its extreme width between the 92nd and the 101st parallels of longitude at about 20° North latitude is 575 m. The total area, including the Shan States, is about 262,000 sq. m., and the population, according to the census of 1911, was 12,115,217. It is formed of three separate tracts—Arakan, the Irrawaddy Valley, and Tenasserim—and is watered by five great streams—viz., the *Irrawaddy*, the *Chindwin*, the *Sittang*, the *Salween*, and the *Myitnge*. The first two rivers have their sources in the Northern chain of mountains in the interior, one head-stream of the Irrawaddy coming from Tibet, where are also the sources of the Salween; the Sittang rises in the hills S.E. of Mandalay, and the Myitnge drains the Shan States to the E. of that city. The Irrawaddy and the Salween are great rivers which, in the lower part of their course, overflow the flat country below their banks during the rainy season, and, higher up, find their way through magnificent defiles. The Irrawaddy is navigable for over 900 m., but the Salween is practically useless as a means of communication, owing to the frequent obstacles in its channel.

The Northern portion of the Province is in the main an upland territory containing much rolling country intersected by occasional hill ranges, and with a few isolated tracts of alluvial plain. The country throughout the Delta is flat and uninteresting. Towards

Prome the valley of the Irrawaddy contracts, and the monotony of the plain is diversified by a wooded range of hills, which cling to the Western bank nearly all the way to the neighbourhood of Thayetmyo, where was the old frontier between Upper and Lower Burma. The Salween Valley contains occasional harmonies of forest, crag, and mountain stream. On the other hand, the scenery in Tavoy and Mergui, and among the myriad islets which fringe the Tenasserim coast, is almost English in its verdure and repose. The forests of Burma abound in fine trees. Among these teak holds a conspicuous place. Almost every description of timber known in India is produced in the forests, from which also an abundant supply is obtained of the varnish used by the Burmese in the manufacture of lacquered ware. Sticklac of an excellent quality is obtained in the woods, and rubber has of late years been extensively planted. A marked feature in all the forests, and indeed all over Burma, is the beautiful flowering trees. Although there is plenty of large game in the country, it is not easy to get at, owing to the dense forests and the difficulty of obtaining experienced *shikaris* and baggage-animals; but good bags of snipe are made all over the country from August to December, and partridge, hare, jungle fowl, and duck shooting is to be had without difficulty in many parts of the Province.

Burma is rich in minerals. Gold in small quantities is won by dredging in the upper reaches of the Irrawaddy River. The Bawdwin mines in the Northern Shan States contain one of the richest silver-zinc-lead ore bodies known. Wolfram is found over a wide area: the Tavoy District is one of the largest wolfram-producing areas in the world. Tin is equally widespread. Seams of coal occur in various parts, but the quality is poor and no mines are now being worked. Mogôk supplies the world with rubies; fine sapphires and numerous other precious stones of the less valuable kinds are found there, and in the Shan States. Petroleum is obtained in large quantities in the Minbu, Magwe, Myingyan, and Pakôkku Districts of Upper Burma, and in smaller quantities in the Arakan Division and elsewhere. Jade and amber are extracted in considerable quantities in the Northern part of the Myitkyina District. In Lower Burma agriculture is the main employment of the people. Chillies, sesamum, tobacco, and sugar-cane are grown, and orchards are found near every village; but rice covers nine-tenths of the total area under cultivation. Over much of the area the soil is very fertile, and bears annual crops without any addition to its fertility in the shape of manure. In Upper Burma there is much greater variety of crops. Rice is the most important crop from the standpoint of area, but it occupies less than two-fifths of the total area under crop;

sesamum, millets, beans, maize, ground-nut, cotton, tobacco, chillies and wheat are the chief crops after rice.

The commercial prosperity of the Province has more than kept pace with its rapidly increasing population. The chief articles exported are rice, timber, beans, cotton, lead, catch, hides, petroleum, candles, rubber, and rubies. The chief imports are machinery, piece-goods, silk, cotton, wool, and provisions, especially preserved milk, liquors, tobacco, iron, salt, and sugar.

The main commercial industries are those connected with the rice, oil, and timber trade. The indigenous manufactures of the country produce little beyond what is required for home consumption. Silk, lacquered ware, gold and silver work, wood and ivory carving, are among the most justly admired of Burmese handicrafts. The best silks are woven at Mandalay, and the silk industry has received a salutary impetus from the Saunders' Weaving Institute, which was recently established by Government at Amarapura. The principal lacquer workers are at Nyaungu, near Pagan; gold and silver work is carried on at Rangoon, Moulmein, Thayetmyo, Mandalay, and to a greater or less extent in all the larger towns; the best wood carvers are in Rangoon, Tharrawaddy, and Mandalay, and the best ivory carvers in Rangoon and Moulmein. The characteristics of Burmese art are vigour and novelty in design, but there is no lack of delicacy and finish in execution so far as lacquer work and silver and ivory-carving are concerned.

Should Burma be visited after a tour in India, the traveller cannot fail to be struck with the great difference in the people and the scenery of the two countries. The merry, indolent, brightly-clothed Burmese have no counterpart in Hindustan, and the richness of the soil and exuberance of the vegetation, together with the sleekness and vigour of the cattle, will be at once remarked. The life of the Burmese is free from the deadening effects of caste and seclusion of the women—two customs which stereotype the existence of so large a part of the inhabitants of India.

The Burmese as a race are of short stature and thick-set. The men wear long hair on their heads, but have little or none on their faces: flat in feature, they show unmistakably their near relationship to the Chinese. The women are well treated and attractive-looking; they go to market, keep shops, and take their full share in social and domestic affairs. Men and women alike are well clad, and delight in gay colours and silk attire.

In religion the Burmese are Buddhists, 86 per cent. of the population professing that religion. But the great majority of Burmans everywhere, and practically all village Burmans, retain the primitive reverence for the *nats*, the spirits of the forests, mountains,

etc. This, Sir George Scott observes, "is the heritage of an immemorial past; it is the core of the popular faith." The Burman has learnt certain formulas; he is scrupulous in giving alms to the monks, and he worships on set days at the pagoda: "but he governs his life and actions by a consideration of what the spirits of the air, the forest, the stream, the village, or the house may do if they are not propitiated." To these *nats*, who have their appropriate shrines, he makes offerings to avert misfortune, and of them he seeks favour for any undertaking, such as building a house or a boat, or making a journey. Each family has a tutelary deity or *nat* of its own, to which a thank-offering is made at the birth of a child or the solemnisation of a marriage. Every Burman is supposed to spend a certain part of his life as a novice, wearing the yellow robe, in the *pôngyi kyaung* (monastery). This is now frequently only a ceremonial observance for a single week; but some stay longer, and some remain to become *pôngyis* or monks. The monks are the schoolmasters of the country, and perform this duty in return for the support they receive from the people. The shaven head and yellow robe of the monk are a common sight in all Burmese villages and towns.

History.—The earliest European connection with Burma was in 1519, when the Portuguese concluded a treaty with the King of Pegu and established factories at Martaban and Syriam. Before 1600 the Dutch settled on the island of Negrais, at the mouth of the Bassein River, and soon after the English East India Company had factories at Syriam, Prome, Ava, and perhaps Bhamo. About the middle of the 17th century all European merchants were expelled from the country, owing to a dispute between the Burmese Governor of Pegu and the Dutch. The Dutch never returned. In 1688 the Burmese Governor of Syriam wrote to the English Governor of Madras inviting British merchants to settle in Pegu, and in 1698 a commercial Resident was sent to Syriam, and a factory was built there, and others at Negrais and Bassein. The French also had a settlement at Syriam. Meanwhile the Burmese dynasty of Ava was destroyed by the rebellion of the Talaing kingdom of Pegu, and the Talaings held sway in Burma till the middle of the 18th century, when Alaung-paya, known as Alompra, whose dynasty till recently reigned in Upper Burma, succeeded in uniting his countrymen and crushing the Talaings. In 1755 Alompra founded Rangoon to celebrate his conquest of the Talaings, and destroyed Syriam. After Alompra's success he found that the French merchants had been supplying warlike stores to the Talaings, and he put all Frenchmen to death. The English, who had generally supported the Burmese, were granted the island of Negrais and a factory at Bassein. In 1759,

however, they were suspected of assisting rebels, so their factories were destroyed, and 10 Englishmen and 100 natives of India were murdered. In the following year Alompra died while laying siege to Ayuthia, the capital of Siam, and the English obtained permission from his successor, Naungdawgyi, to re-establish the Bassein factory. Sinbyuwin, who succeeded Naungdawgyi, took Manipur and Siam, and defeated two inroads from China. He died in 1776, and was succeeded by Bodawpaya, who conquered Arakan in 1784. This brought Burma into collision with the British in Chittagong. The Arakanese outlaws took refuge over the border, and harassed the Burmese rulers by inroads from British territory. This gave rise to friction, and in order to assist in the adjustment of matters in dispute, an envoy was sent to Burma in 1795 by the Governor-General of India. In 1819 Bodawpaya died, and was succeeded by Bagyidaw. Matters had not improved on the border, and in 1824 the Burmese invaded Manipur and Assam, and Maha Bandula, the great Burmese General, started with an army from Ava to take command in Arakan and invade Bengal.

The British Government formally declared war against Burma on 5th March 1824. The Burmese were driven out of Assam, Cachar, and Manipur; and Rangoon, Mergui, Tavoy, and Martaban were occupied by British troops. These, however, suffered much from sickness as soon as the rains began. All movements by land became impracticable, and by December the force occupying Rangoon had been reduced by sickness and otherwise to about 1300 Europeans and 2500 Indians fit for duty. The Burmese, under Maha Bandula, made a determined effort to drive the invaders into the sea; but their attack, in which 60,000 men are said to have taken part, was repulsed with great slaughter, and the Burmese army dwindled away, a portion of it retiring to Danubyu, which Maha Bandula fortified with some skill for a further effort. The British troops, having been reinforced, marched up the Irrawaddy Valley, and on 2nd April 1825 took Danubyu. Maha Bandula was killed in the cannonade, and with him all serious resistance came to an end. Prome was occupied, and the troops went into Cantonments for the rains. In September 1825 the Burmese endeavoured to treat, but, as they would not agree to the terms offered, hostilities recommenced; and in December the British advanced, and, after several actions with the Burmese troops, reached Yandabo, 16th February 1826. Here the envoys of the King signed a Treaty ceding to the British Assam, Arakan, and the coast of Tenasserim, and agreeing to pay a million sterling towards the cost of the war. In November 1826 a commercial Treaty was signed at Ava, and in 1830 the first British Resident was appointed under the Treaty to the Burmese capital.

In 1837 Bagyidaw was deposed by his brother Tharrawaddy, who in 1846 was succeeded by his son Pagan Min.

In 1852, owing to a succession of outrages committed on British subjects by the Burmese Governor of Rangoon, for which all reparation was refused, the British again declared war against the King of Burma; and towards the close of the same year Lord Dalhousie proclaimed that the whole of the Province of Pegu, as far N. as the parallel of latitude 6 m. N. of the fort at Myede, was annexed to the British Empire. Almost immediately after this Pagan Min was deposed by his brother Mindon Min, who ruled his curtailed kingdom with wisdom and success.

The pacification of Pegu and its reduction to order occupied about ten years of constant work. In 1862 the British possessions in Burma—namely, the Provinces of Arakan, Pegu, Martaban, and Tenasserim—were amalgamated and formed into the Province of British Burma, under the administration of a Chief-Commissioner, Lieutenant-Colonel (afterwards Sir Arthur) Phayre being appointed to that office.

In October 1878 King Mindon died, and was succeeded by his son, King Thibaw, fifth in descent from Alompra. Early in 1879 the execution of a number of the royal family excited much horror in Lower Burma, and relations became much strained owing to the indignation of Englishmen at the barbarities of the Burmese Court, and the resentment of the King and his Ministers at the attitude of the British Resident. In October 1879, owing to the unsatisfactory position of the British Resident in Mandalay, the Government of India withdrew their representative from the Burmese Court. Meanwhile, under the lax rule of Thibaw the condition of Upper Burma had been gradually drifting from bad to worse. The Central Government lost control of many of the outlying districts, and the elements of disorder on the British frontier were a standing menace to the peace of Lower Burma. The King, in contravention of Treaty obligations, created monopolies to the detriment of the trade of both England and Burma, and, while the Indian Government was unrepresented at Mandalay, representatives of France and Italy were welcomed, and two separate embassies were sent to Europe for the purpose of contracting alliances with sundry Continental powers. Matters were brought to a crisis in 1885, when the Burmese Court imposed a fine of Rs.2,300,000 upon the Bombay-Burma Trading Corporation, and refused the proposal of the Indian Government to submit the matter to arbitration. In view of the long series of unsatisfactory episodes in the British relations with Burma during Thibaw's reign, the Government of India decided once for all to adjust the relations between the two countries. An ultimatum was

sent to King Thibaw, requiring him to suspend action against the Corporation; to receive at Mandalay an envoy from the Viceroy, who should be treated with the respect due to the Government which he represented; and to regulate the external relations of the country in accordance with the advice of the Government of India. This ultimatum was despatched on 22nd October 1885. On 9th November a reply was received in Rangoon amounting to an unconditional refusal of the terms laid down. On 7th November King Thibaw issued a proclamation calling on his subjects to drive the British heretics into the sea. On 14th November 1885 the British expedition crossed the frontier, and advanced to Mandalay without encountering any serious resistance. On 28th the British occupied Mandalay, and next day the King and his evil genius, the Queen Supaya Lat, were sent down to Rangoon and afterwards to India. He died at Ratnagiri, S. of Bombay, on 15th December 1916. Upper Burma was formally annexed on 1st January 1886, and the work of restoring the country to order and introducing settled government commenced. For some years the country was disturbed by the lawless spirits who had been multiplying under the late *régime*, but by the close of 1889 all the larger bands of marauders had been broken up, and since 1890 Upper Burma has enjoyed greater freedom from crimes of violence than the Province formerly known as British Burma. In the time of Burmese rule China claimed a certain shadowy suzerainty over the Burmese empire. In July 1886 a Convention was signed at Peking, whereby China recognised British rule in Burma, and agreed to the demarcation of the frontier and the encouragement of international trade. By a further Treaty, signed on the 1st March 1894, the frontier was defined, and new arrangements made for the encouragement of trade and the linking of the telegraph systems of Burma and China. A breach of the Treaty by the Chinese in 1895 led to the conclusion of a supplementary agreement on the 4th February 1897, which defined the boundary afresh and made further provision for opening China to trade. For some years after the annexation of Upper Burma there was some uncertainty with regard to the boundary between Siam and a portion of certain of the Shan States. The Siamese claimed as part of the Province of Chengmai so much of Karenni, and of some other small States as lay to the east of the Salween. In order to investigate these claims the territory was visited by Mr Ney Elias in 1890. The Siamese refused to take part in that exploration, but in 1892-3 a Joint Commission of English and Siamese officers demarcated the frontier along the line selected by Mr Ney Elias. In 1897 the Province was constituted a Lieutenant-Governorship under Sir Frederick Fryer. The present Lieutenant-Governor is the Hon. Sir Reginald Henry Craddock, K.C.S.I. The

Army in Burma is now under the command of a Major-General, and forms the Burma Division.

The census of 1911 showed that the population had increased during the past decade by 15 per cent. The trade of the Province has greatly developed under British rule. The standard of living among the agricultural classes has improved.

Climate, etc.—The climate of the Province for some distance from the coast consists of a wet season, from 15th May to 15th November, and a dry season for the rest of the year. Farther inland the rain becomes less; but, as Burma must at present be reached from the sea, the best time for visiting the Province is from November until February. During the wet season the rainfall at Rangoon is heavy—amounting to upwards of 90 in., and after February the heat is considerable till the first refreshing showers fall in May.

Means of Access.—The quickest route to Burma is by Brindisi to Bombay, rail to Calcutta or Madras, and thence steamer to Rangoon. A favourite route is by the Bibby line, which despatches steamers to Rangoon from Liverpool and London every fortnight. The steamers are large and well found in every respect, and perform the journey from Liverpool to Rangoon in about 30-32 days (see p. clxxv). They call at Marseilles and Colombo, and if the traveller proceeds to Marseilles by train he can complete the journey to Rangoon in seventeen days. Messrs Henderson also run steamers from Liverpool (15 Vincent Street) to Rangoon. Rangoon can also be reached from Calcutta, Madras, or Colombo, by the steamers of the British India Steam Navigation Co. The voyages from Calcutta and Madras occupy three and four days; that from Colombo takes six to seven days. The steamers from Calcutta to Rangoon start thrice a week; those from Madras (90 hours' sea voyage) once a week, and from Colombo once a fortnight. (These arrangements, of pre-War time, have been upset by the War.)

General Hints.—Burma has hitherto been little visited by tourists, and travelling arrangements, except on the railway and by a few main lines of steamer communication, are primitive. Letters of introduction will be useful. Except at a few places (Rangoon, Moulmein, and Mandalay) there are no hotels, and the traveller, when he quits line of railway or Irrawaddy steamer, must get leave from the Deputy Commissioner of the district to put up at Government bungalows, and must take bedding and a few cooking utensils with him. He will do well also to provide himself with some books about Burma. A list of them will be found in the Introduction, at p. xxxi. Free use is made of the works there mentioned, and especially of Shway Yoe, in the following pages.

Pagodas and Monasteries.—The pagodas and monasteries form

the chief objects of interest throughout Burma, and as they are mostly built on very similar plans a general description of these two classes of religious buildings will be useful. The following description is taken in the main from Shway Yoe. The *Pagodas*, while differing in various minor details, consist almost invariably of a masonry terrace, a high plinth, a bell-shaped body, and a *ti* or "umbrella" spire, a construction formed of concentric rings of beaten iron lessening to a rod with a small vane on the top. From the rings hang little bells with flat elongated clappers, which are caught by the wind and maintain day and night a melodious ringing. They are usually built upon elevated platforms, and are erected over relics of Gautama Buddha. In almost all the larger pagodas there are arched wings on each face, serving, as it were, as antechapels, and each containing a figure of Gautama, while the surrounding platform is frequently studded with minor temples, image houses, altars for the deposit of offerings, large bells, flag-posts, images of strange monsters, and other curious objects. These pagodas are to be found in every village in Burma, capping the hills frequently in out-of-the-way places, and contributing everywhere to the picturesqueness of the country. There is a special reason for this multiplication of fanes. No work is so highly regarded as the building of a pagoda. The builder is looked upon as a saint on earth, and when he dies he attains the holy rest. It avails little to repair a previous dedication, unless it be one of the great world shrines at Rangoon, Pegu, Prome, or Mandalay. According to custom and tradition, in order to prevent the admixture of *karma*, or merit, shrines built by royalties must not be repaired by commoners, and among commoners themselves the previous consent of the original founders, or their descendants, is always necessary to repair an old religious building. Hence old pagodas are seldom repaired, but new ones are constantly springing up. Outside most villages in Burma, however small, there stands also a *monastery* or *pôngyi kyaung*, where the monks pass their tranquil lives and supply a simple education to the children of the village. Ordinarily the monastery is built of teak, but in many places brick buildings are now being erected. The shape is always oblong, and the inhabited portion is raised on posts or pillars some 8 ft. or 10 ft. above the ground. They are never more than one storey high, for it would be an indignity to a holy monk to have any one over his head. A flight of steps leads up to the veranda, which extends all along the N. and S. sides and frequently all round the building. The steps are usually adorned with carvings or plaster figures of *nats* or ogres. From the raised floor rises the building with tier upon tier of dark massive roofs capped at intervals with tapering spires or *pyatthats*. The buildings are in many cases ornamented with the most elaborate

carving. The interior accommodation is very simple. It consists, in the main, of a great central hall divided into two portions, one level with the veranda where the scholars are taught, and the other a raised dais 2 ft. or so above the level of the building. Seated upon this the priests are accustomed to receive visitors, and at the back, against the wall, are arranged images of Gautama interspersed with manuscript chests, small shrines, fans, and other religious implements, and miscellaneous gifts of the pious, heaped together ordinarily in very careless fashion. There are occasionally dormitories for the monks, but, as a rule, they sleep in the central hall, where the mats which form their beds may be seen rolled up round the pillows against the wall. In many monasteries there is a special room for the palm-leaf scribes, often detached from the main building, as are the cook-room and the bathing-houses. In one corner is usually a *thein*, a building for the performance of various rites and ceremonies, and more particularly for the examination and ordination of priests. The traveller will find it perfectly easy to visit and closely inspect as many pagodas and monasteries as he pleases. The pagodas are open to all, and at the monasteries he may be generally certain of a friendly welcome from the priests, provided he can speak Burmese or is accompanied by any one acquainted with that language. The priests are treated with great respect by the people of the country, and are invariably addressed as *payu*, or lord; and any one who visits a monastery should therefore bear in mind that the monks are accustomed to be treated with deference.

Pwès.—The traveller should make a point before leaving Burma of seeing something of the *Pwè*, the national amusement of the people. Pwès are of four kinds—the *Zat pwè*, which consists of acting, singing, dancing, and clowning; the *Yokthe pwè*, in which a similar performance is gone through by marionettes; the *Yein pwè*, a kind of ballet, with music and song, performed by a considerable company of young men or maidens, as the case may be; and the *Anyein pwè*, in which the number of actors is very limited: it is also accompanied with song and music, lasting from about 9 P.M. to about 2 A.M. Yein pwès are usually performed only on special occasions—in honour of some high official, or at a great pagoda feast; but *Zat pwès*, *Yokthe pwès*, and *Anyein pwès* are of constant occurrence on nearly all moonlight nights in every large town, and the traveller should have no difficulty in seeing all forms of entertainment, either in Rangoon or Mandalay. The performances take place in the open air, last all night, and usually for several nights in succession, and are free and open to all, the actors being paid by the giver of the entertainment. The majority of the audience stay the whole night—say from 8 P.M. till sunrise; but an hour or two of the performance

will probably satisfy the British traveller. A full description of the different kinds of pwè is given by Shway Yoe in chapter 29 of *The Burman*.

The Irrawaddy Flotilla Company deserves special notice as one of the most successful steamer enterprises of modern days. The various vessels of the Company's fleet were nearly 300 in number, representing a tonnage of 92,000 tons; and regular services by express and cargo-boats were maintained between Rangoon and Mandalay, Bassein, and Henzada, between Mandalay and Katha and Bhamo, up the Chindwin, and for a short way up the Salween River. For sailings to Mandalay and Bhamo, see Index under these places.

RANGOON.

Arrival.—It may be taken for granted that the traveller, either from England or from India, will land at Rangoon, and it will therefore be convenient first to describe the principal objects of interest in that city, and then to mention a few of the principal tours which can be made thence to other parts of the Province.

RANGOON * (lat. $16^{\circ} 46'$, long. $96^{\circ} 11'$) is the capital of the Province and the seat of the Local Government. It is situated on the Rangoon River, which is connected by waterway with the Irrawaddy. In 1852 it was a mere fishing village. In 1911 it was a city of over 293,000 inhabitants, having a trade larger than that of any Indian port save only Calcutta and Bombay. The value of the private sea-borne trade is now £39,000,000. Forty years ago it was under £3,000,000. The trade is divided into £15,000,000 of imports and £24,000,000 of exports. The imports are principally cotton goods, metals, provisions, silk, machinery, and sugar; the exports, rice (two-thirds of the whole), wood, raw cotton, oils, and hides. The number of steamers entering and clearing from the port is about 1390, with a tonnage of 2,630,000 tons; and the receipts of the Port Trust amount to £244,200 yearly. The number of sailing-vessels is 125, with a tonnage of 11,000 tons. During the same period the population has increased from about 90,000 to 293,000 souls, of whom 97,000 are Burmese, 108,000 Hindus, 54,000 Muhammadans, 23,000 Christians, and 7000 Chinese. An electric tramway runs E. and W. through the town and business quarters, and to the Shwe Dagon Pagoda. The municipality covers an area of about 31 sq. m., and has an income of 40½ lakhs of rupees.

Rangoon city consists of the municipality, the Cantonment, and the port. It is lit with electricity. Its water supply is obtained from a large reservoir lake constructed at Hlawga, about 17 m. beyond the town. The drainage system consists of gravitating sewers, which receive the sewage from house connections and carry it to ejectors. These discharge their contents automatically into a main sewer, through which all the night soil and sullage water are forced into an outfall near the mouth of the river. The system has been working with most successful results.

The principal objects of interest in and around Rangoon may be classified as follows:—

1. The pagodas and monasteries.
2. The bazars and native shops.
3. The rice, timber, and oil works.
4. The public buildings.
5. The Cantonments, parks, and lakes.
6. The remains at Syriam.

(1) **Pagodas and Monasteries.**—There are numerous pagodas in and about Rangoon. The *Shwe Dagon* and the *Sule* deserve special mention. The great *Shwe Dagon Pagoda* is the most venerable, the finest, and the most universally visited of all places of worship in Indo-China. Its peculiar sanctity is due to the fact that it is the only pagoda known to Buddhists which is credited with containing actual relics, not only of Gautama, but of the three Buddhas who preceded him in this world. Hence it attracts countless pilgrims, not only from all parts of Burma, but also from Cambodia, Siam, Korea, and Ceylon. It is situated about 2 m. from the Strand, and may be reached either by electric tramway (much used

both by Europeans and Indians), or by taxi or ticca gharry. The stately pile stands upon a mound, partly natural and partly artificial, which has been cut into two rectangular terraces one above the other, each side, as in the case of all pagodas, facing one of the cardinal points of the compass. The upper terrace, which has been carefully levelled and paved and repaved by the pious, rises 166 ft. from the level of the ground, and is 900 ft. long by 685 ft. wide. The ascent was by four flights of brick steps, one opposite the centre of each face—but the Western face has been closed by the fortifications built by the British conqueror to dominate the town and secure the pagoda, where there was so much desperate fighting in the Burmese Wars. The S. ascent is that most frequently used. At the foot are two gigantic leogryphs, built of brick and covered with plaster. The effect is rather spoilt by an external porch which was added. From them up to the platform the long stairs are covered by a rising series of handsomely-carved teak roofs, supported on huge wood and masonry pillars. The heavy cross-beams and the panelling are in many places embellished with frescoes representing scenes in the life of Gautama and his disciples, and with hideously curious representations of the tortures of the wicked. The steps themselves are exceedingly primitive and dilapidated, consisting in some parts of broad stone flags, and in others of simple sun-dried bricks, worn by the feet of myriads of worshippers. On either side are beggars and numerous stalls, at which gold-leaf, flowers, and other offerings may be bought, and on the E. side, just a little above the bottom of the flight of steps, there is a small bazar in which marionettes, gongs, drums, etc., may be obtained. The stairs debouch on a broad, open, flagged space, which

runs all round the pagoda, and is left free for worshippers. In the centre of this springs, from an octagonal plinth, the pagoda itself (see Fergusson's *Eastern Architecture*, 2, 342-7). It has a circumference of 1355 ft., and rises to a height of about 370 ft., or a little higher than St Paul's Cathedral. It is profusely gilt from base to summit, and is surmounted by the usual gilt iron-work *ti* or "umbrella," on each of whose many rings hang multitudes of gold and silver jewelled bells. This *ti* was presented by Mindon Min, the late King of Burma, and was placed on the summit at a cost of about £50,000. It was constructed by voluntary labour, and subscriptions in money and jewels, with which the vane and uppermost band are richly studded, flowed in from all parts of Burma. The pagoda has recently been encircled by several rings of electric incandescent lamps, which are lit every night and make it almost as conspicuous a landmark by night as it has always been by day. Some years ago the whole pagoda was regilt, and the *ti* was then lowered to the platform, and replaced, renovated and with many costly jewels added. At the corners of the basement are somewhat Assyrian-like figures of *Manōhithiha*—creatures with two bodies and one head, half lion, half man, with huge ears and ruffled crest—and all round about are figures of lions displaying an ample show of teeth between their grinning lips. The tale is that a certain Indian Princess became the wife of a lion; subsequently this lion was slain by his own son. Soon after the Prince was seized with a severe ailment, which could be cured only by dedicating to a pagoda the figure of a lion. Since then, it is said, the placing of the figures of lions at the entrances of pagodas has been in vogue. In reality these lions are the *dwarपालs*, or guardians of the entrance to the

pagodas, and were probably relics of the pre-Buddhist cults of India.

The four chapels at the foot of the pagoda are adorned by colossal figures of the sitting Buddha, and in the farthest recess, in a niche of its own, is a still more goodly figure, the thick gilding darkened in many places by the fumes of thousands of burning tapers and candles. Hundreds of Gautamas, large and small, sitting, standing, and reclining, white and black, of alabaster, sun-dried clay, or wood, surround and are propped up on the larger images. High stone altars for the offering of rice and flowers stand before the lions interspersed with niche altars for burnt offerings. On the outer edge of the platform are a host of small pagodas, each with its *ti*; *tazawngs*, image-houses overflowing with the gifts of generations of pilgrims; figures of Buddha in single low stone chapels; tall posts (called *tagundaing*), flaunting from which are long cylindrical streamers of bamboo framework, pasted over with paper or cloth, depicting scenes from the sacred history, and often inscribed with pious invocations from the offerer, or surmounted by the sacred *hintha* (Brahminy goose), the emblem of the Talaings, or the *kalaweik*, the crane of the Burmese. Interspersed among these are multitudes of bells of all sizes. The bells are hung on stout cross-beams, and beside them lie deers' antlers and wooden stakes with which the worshipper strikes them as he passes, and so calls the attention of *nats* and men to his acts of piety. The alternative strokes must be struck on the ground, so as to invoke the testimony of the god of the earth. In the N.E. corner, covered by a gaily-decorated wooden shed, hangs a bell of enormous size, inside which half-a-dozen men can stand. It was presented by King Tharrawaddy in 1840, and is said

to weigh 42½ tons, and to be the third largest bell in the world. It bears a long inscription recounting the merits gained by the monarch who presented it. The bell has a curious history. After the Second Burmese War the British made an attempt to carry it off to Calcutta as a trophy, but by some mishap it was sunk to the bottom of the river. The European engineers failed to raise it. The Burmans after some years begged that the sacred bell might be restored to them if they could recover it. The petition was granted with a sneer; but they set to work, got it out, by lashing bamboos to it and causing it to float from its sunk position, and carried it in triumph to the place where it now hangs. It would be impossible to describe in any detail the myriad objects of interest which are gathered on the pagoda platform; but the traveller should not fail to examine the magnificent carving at the head of the Eastern ascent, nor that on the canopy of the colossal recumbent figure of Gautama on the Western face of the platform. The carving and inlaid glass work on all four of the chapels attached to the pagoda itself deserve notice, the carving over the Eastern chapel being particularly curious; it has been supposed to represent a scene from the life of the Buddha, or from one of the Jatakas, got up in a modern style, illustrative of the capture of the pagoda by the British. The British soldiers, with their rifles, and their officers, each holding a telescope to his eye, are clearly recognisable on the highest tier, while on a lower tier the defeated Burmese show little sign of despondency. In the N.E. corner of the platform will be found the graves of certain officers killed in the Second Burmese War. To the W. of the platform is the Government Arsenal. At the base of the pagoda hill are many monasteries embowered in groves of palmyra palms and shady trees,

and to the S. is a small convent of nuns, not far from the Rest-house built by the King of Siam for pilgrims from his dominions.

The platform is never deserted. Even long after midnight the voice of the worshipper may be heard in the night air chanting his pious aspirations, while on feast-days the laughing, joyous crowd of men and maidens in their gay national dress makes the platform of the Shwe Dagon one of the finest sights in the world. The visitor should, if possible, take an interpreter with him, and should provide himself with a few rupees. He can then, if he pleases, have his fortune told by one of the numerous *sayas*, who are always to be found on the platform; or he can buy for a rupee or two one of the quaint triangular gongs used by the religious mendicants to attract the attention of the pious, or supply himself with gold-leaf, prayer flags, flowers, or specimens of the curious marionettes and other toys which are offered for sale on the steps and on the platform.

Buddhists fix the date of the erection of the Shwe Dagon Pagoda at 588 B.C.; but state that the site was sacred for cycles before, since the relics of the three preceding Buddhas were found interred when the two Talaing brothers, Taphussa and Bhallika, came with their precious eight hairs of Gautama to the sacred hill. The original pagoda is said to have been only 27 ft. high, and to have attained its present height by being repeatedly cased with an outer covering of bricks several feet in thickness. The shrine has remained unaltered in size and shape since 1564, and probably will never be altered again. At all times and at all distances it appears imposing and sublime, like the religion whose followers have built it. It looks best, perhaps, on a bright moonlight night, and the traveller is advised, if

practicable, to pay a visit to the platform by night as well as by day. The above description comes mainly from Shway Yoe. A useful little local guide can be purchased in Rangoon. Another guide-book to the pagoda has been prepared by Dr Baker, the Secretary to the Y.M.C.A.

The *Sule Pagoda*, close to the Strand, is well worth a visit, and the traveller will be much interested if he ascends the platform and examines the many curious shrines and figures with which it is adorned. Among others will be found a representation of the *Sule Nat*, the spirit after whom the pagoda is named, and the legendary guardian of the hill upon which the Shwe Dagon Pagoda is erected. Behind the *Nga-datkyi Pagoda*, near the Royal Lakes, at *Iamwe*, on an eminence, has been built an enormous reclining figure of Buddha called the *Shwe Tha Lyaung*, which monthly attracts thousands of people, including many Europeans. The cavity of each ear could easily accommodate two or three persons.

The Rangoon Monasteries are very numerous. They are none of them of any special interest, and the traveller will probably be satisfied by paying a brief visit to two or three of them. Some of the most picturesque are at *Kemmendine*, near the railway station, and a visit to them may be combined with an inspection of the images of Gautama in process of manufacture hard by, and of the shops of the *kalaga* makers, which are also at *Kemmendine*. The *kalaga* is a kind of blanket, usually red, covered with strange figures in appliqué work. *Kalagas* can sometimes be purchased ready-made, but must usually be ordered beforehand. They make quaint and handsome *portieres* or hangings. There are other large monasteries in *Bahan*, *Wingaba*, *Godwin Road*, and at *Pazundaung*.

(2) **The Bazars and Indian Shops.**—The bazars are a great institution throughout Burma. They are large markets, usually the property of the municipality, in which much of the retail trade of the country is carried on. They are also the great centres of gossip among the Burmese. A visit should be made to the *municipal bazars* on the Strand Road and at Kemmendine, and to the *Surati bazar* in China Street. At the bazar in Strand Road specimens of the silks and lacquer work for which Burma is famous can be purchased. Apart from the bazars, the Indian shops are not of special interest. A feature of Rangoon that needs mention are the Indian night stalls along the footpaths principally of the bazar quarter, where a great variety of eatables and merchandise are sold. The best shops for the traveller who wishes to buy without waiting while Burmese craftsmen make to his order are *Hirst*, in Phayre Street, for Burmese curios; *Khaimchand Tejmal*, in Phayre Street, for Burmese, Chinese, and Japanese curios, and for oriental silks, etc.; *Goonamal Parasram*, in Merchant Street, for Burmese and Indian goods. In the above shops he will find fair specimens of oriental art at reasonable prices; but if he desires the best, or wishes to see the articles in process of manufacture and to buy rather more cheaply, he should go to Godwin Road for silver or woodwork carving. He will find several shops on the E. side of the road. For silver work *Maung Shwe Yon* and *Maung Po Thei* are about the best. But these men maintain little or no stock of articles for sale. The traveller must order what he wants and wait till he gets it. The usual charge for embossed silver bowls is double the weight of the bowl in rupees; but for the finest work prices are higher.

(3) **The Rice, Timber, and Oil Works.**—It will be worth while to visit one of the great rice-mills. Those of *Messrs Steel Bros.*, at Kanaungto, and of *Messrs Bulloch Bros.*, at Pazundaung, are two of the largest, and permission to visit them can generally be obtained. There are over 150 rice-mills in Burma, and nearly 100 saw-mills, employing 43,000 hands. The Bombay-Burma Trading Corporation's timber-yard at Alon, the Government timber depot at Alon, and the Bombay-Burma Trading Corporation's saw-mill and timber depot at Dalla should also be visited. Elephants are employed there to stack the timber, and it is interesting to observe the intelligence with which they perform the task. The oil works of the Burma Oil Co., Ltd., at Dunneedaw and Syriam, are also worth seeing.

(4) **The Public Buildings.**—Rangoon can boast of many fine public buildings. The **Post Office**, the **Currency Buildings**, and the **Sailors' Home** are on the Strand; the **Telegraph Office** at the corner of Dalhousie and Phayre Streets; and the new **Court Houses** on Barr Street facing Fytche Square garden. To the E. of the business quarter is a fine pile of buildings for the accommodation of the **Secretariat** and other public offices. In front of it will be noticed the "**Services Memorial**"—a drinking fountain erected by members of the various Civil Services of the Province in memory of their comrades who were killed or died during the Third Burmese War. The names of the officers commemorated are inscribed on the shields surrounding the fountain. The very handsome **Roman Catholic Cathedral** is at the corner of Montgomery Street and Sparks Street, close to the Secretariat Buildings. To the N.W. of the Cantonment is **Government House**—a handsome three-storeyed

building, erected at a cost of 6 lakhs of rupees. The **Rangoon College** and the **General Hospital**, situated on either side of Commissioner's Road, are spacious buildings, and near to them is the **Anglican Cathedral**. Travellers interested in the progress of education in the E. would do well to pay a visit to the College, and also to **St John's (S.P.G.)**, on Mission Road and St John's Road; **St Paul's** (Roman Catholic), near the new public buildings; and the **Baptist Institutions** at Alon. The **Bernard Free Library**, in the compound of the Rangoon College, contains an interesting collection of ancient Pali, Burmese, Talaing, and Sanskrit palm-leaf manuscripts. The **Government Printing-Press** is situated to the E. of the Secretariat. In the N.E. corner of the Parade Ground the **Jubilee Hall**, which serves as a theatre, was erected to commemorate the Jubilee of her late Gracious Majesty Queen Victoria. The hall is used for public meetings and for recreation purposes. A statue has been erected at the entrance to Dalhousie Park as a memorial of King Edward. Lastly among public buildings may be mentioned the **Railway Station** on King George Avenue, the **Dufferin Hospital** in Mission Road, and the **Jail** on Commissioner's Road, one of the largest in the British Empire, having accommodation for over 3000 prisoners. Many different industries are conducted by the prisoners, and in the jail salesroom specimens of their handicraft may be purchased, including excellent carvings and furniture. The construction of a Provincial Museum is soon to be undertaken on a convenient and central site. The **Phayre Museum** was close to the Bernard Library, but has been removed to make room for the new General Hospital, and housed in a room of the Secretariat offices pending the construction of a special building ;

admission to it is obtained by special permission of the Commissioner of Pegu.

(5) **The Cantonments, Parks, Gardens, Zoo, and Lakes.**—These afford pretty rides and drives and an excellent service of taxi-cabs places the whole of them within easy reach of the traveller. He should take one drive in Cantonments, say along Godwin Road, past the Parade Ground and Racecourse, then to the left past the Pegu Club, to the Prome Road, then along Prome Road to Halpin Road (the "Ladies' Mile"), along Halpin Road to the Gymkhana, thence past Government House along Alon Road to the Great Pagoda, and thence through the Cantonment gardens and back by Voyle Road to the town.

Another drive which should on no account be omitted starts from the railway station, passing Northward through the Victoria Memorial Park, opened by King George V., then Prince of Wales, on 13th January 1906. On the way are enclosures for wild beasts, which form a great attraction to the Burmese. Thence the drive circles round the Royal Lakes, the banks of which are planted with flowering shrubs. There is a favourite promenade with a bandstand on a spot of land jutting out from the N. The view of the Shwe Dagon Pagoda across the water is very striking, the effect being particularly fine when the sun is setting behind that. The Boat Club (private) is just opposite on the S. shore. The drive continues to the Cantonments or more directly back to the town; but those who are prepared to go farther afield can obtain a very pretty drive by going along the Prome Road to the Victoria Lake, skirting the lake and returning by the Kokine Road. By this road (total distance about 15 m.) they will pass through miles of pine-

apple gardens, among which various picturesque and shady rides can be had. A very interesting drive, only rendered possible of recent years by the advent of the taxi-cab, is out on the Prome Road to the 13th mile, thence to the W. along the Mingaladon Road, past the very pretty Mingaladon Golf-course and Club House to the Rangoon Insein Road at Insein, by which the traveller returns to the city: total distance about 28 m.

There are several public squares and gardens, and a picturesque park, Dalhousie Park, surrounds the Royal Lake. Band performances are given at these places on every day of the week excepting Sunday.

(6) **Syriam.**—The traveller who has an afternoon to spare may well pay a visit to Syriam. It can be reached from Rangoon by ferry. Syriam was formerly a place of some importance, and is of special interest as being the site of the earliest European settlements of any importance in Burma. The town is said to have been established in 787 A.D., but little is known of its history up to the 16th century, when it was presented by the King of Arakan to Philip de Brito, who, with his Portuguese, had assisted the King in the conquest of Pegu. In 1613 Syriam was besieged and captured by the King of Ava, all the Portuguese being either slain or sent to Upper Burma, where a few of their descendants exist to this day. From 1631 to 1677 the Dutch maintained a factory at Syriam. The English also had a factory, which was re-established in 1698, and destroyed by the Burmese in 1743. Nothing now remains of these once flourishing depots except the substantial ruins of an old Church, some tombs, and the foundations of a few masonry houses. The Church was built by

Monseigneur Nerini, the second vicar-apostolic of Ava and Pegu, in the early part of the 18th century. In 1756 the bishop was murdered by Alompra. From that year until 1760 the mission remained deserted, and was then removed to Rangoon. The ruined Church is now buried in the jungle about $\frac{1}{2}$ m. from the landing-stage, and, being a "protected monument" is looked after by Government. If the traveller is accompanied by an interpreter, he will have no difficulty in finding some one in the village to show him the way to the ruins. Six m. from Syriam is the Kyaikkauk Pagoda standing on a hill, which affords a fine view. This is a prominent landmark as one approaches Rangoon from the sea. Twenty years ago, a mere village of about 1000 inhabitants, Syriam was selected by the Burma Oil Company as the site of their great oil refineries, and is now a flourishing town with a population of over 10,000 inhabitants, and at the present its archaeological interest is rivalled by its industrial importance.

ROUTE I.

To Mandalay, Bhamo, and the first defile, returning to Rangoon *via* Prome.

The arrangements for this tour will depend entirely upon the amount of time which the traveller is prepared to devote to it. If he has only a few days at his disposal he will not be able to do more than proceed to *Mandalay* by rail, spend two or three days there, and return by the same route to

Rangoon. If he has a week at his disposal he may proceed to Mandalay by rail, stopping an afternoon at *Pegu*, and may return by steamer to *Prome*, and thence by rail to Rangoon. To the leisurely traveller the whole voyage (a week) in the comfortable Irrawaddy steamers from Rangoon to Mandalay may be recommended. There is much beauty of a quiet kind in the river below. Three weeks will enable him to extend his tour to *Bhamo*; and a longer period to go on to the first defile and to break the return journey at the *Ruby Mines*, at *Pagan*, and at *Yenangyaung*. A visit to the ruby mines, 50 m. from the river-bank, can now be made by motor service. *Pagan* and *Yenangyaung* can be more easily managed, as they are near the river-bank, but a visit to either place will involve small special arrangements. In the following paragraphs a few brief particulars will be given of the principal places which may be visited on a somewhat prolonged tour. The traveller must decide for himself what to see and what to omit.

An express train leaves Rangoon in the forenoon, reaches *Pegu* in 2 hrs., and Mandalay the following morning. There is a fast night train also, leaving Rangoon in the evening. There is a motor service to Thanatpin on the *Pegu-Sittang Canal*, 7 m. off, which should be used. The traveller who wishes to see *Pegu* can thus allow himself a few hours of daylight there, after which he can dine at the railway refreshment rooms and go on by the night mail to Mandalay.

47 m. **PEGU** station (R., two D.Bs.: a Club, open to visitors; hackney carriages procurable), a town of 17,104 inhabitants, the headquarters of the District of that name, is said to have been founded in 573 A.D. by emigrants from *Thaon*, and was once the capital of the *Talaing* kingdom. It is

described by European travellers of the 16th century as of great size, strength, and magnificence. It was destroyed by *Alompra*, but rebuilt under *Bodawpaya*. Of late years the population has very greatly increased. It is interesting chiefly on account of its pagodas and a colossal figure of *Gautama*.

The *Shwehmawdaw Pagoda*, lying E. of the railway station, and said to contain two hairs of *Buddha*, is a shrine of great sanctity. Successive Kings of *Burma* and *Pegu* lavished their treasures on it in repairing and enlarging it. When originally built it was only 75 ft. high, but as it now stands it is about 288 ft. high and about 1350 ft. in circumference at the base. It was last repaired by *Bodawpaya* about 100 years ago, and not long since was re-gilt under the supervision of the local elders (see *Ferguson, Ind. Arch.*, 2, 343-4).

A good panoramic view of *Pegu* and its suburbs is obtained from the *Shweaungyo Pagoda*, which is situated at the centre of the E. wall of the city. At about 700 yards from the S. face is *Jetuvati*, the encampment of *Alompra* when he beleaguered the town in 1757 A.D. Within the walls are visible the sites of the Palaces of the Kings of *Hanthawaddy*. Traces of a double wall and moat may also be seen. Outside the N.E. corner of the walls is rising ground, the site of the ancient city of *Hanthawaddy*.

The enormous recumbent figure of *Gautama*, known as the *Shwethalyaung*, is about 1 m. to the W. of the railway station. It is 181 ft. long and 46 ft. high at the shoulder. According to the *Burmese* histories it was built by *Migadeikpa Min-ngè* in 994 A.D. *Pegu* was taken by *Alompra* in 1757 A.D., and utterly destroyed for a generation. In the mean-

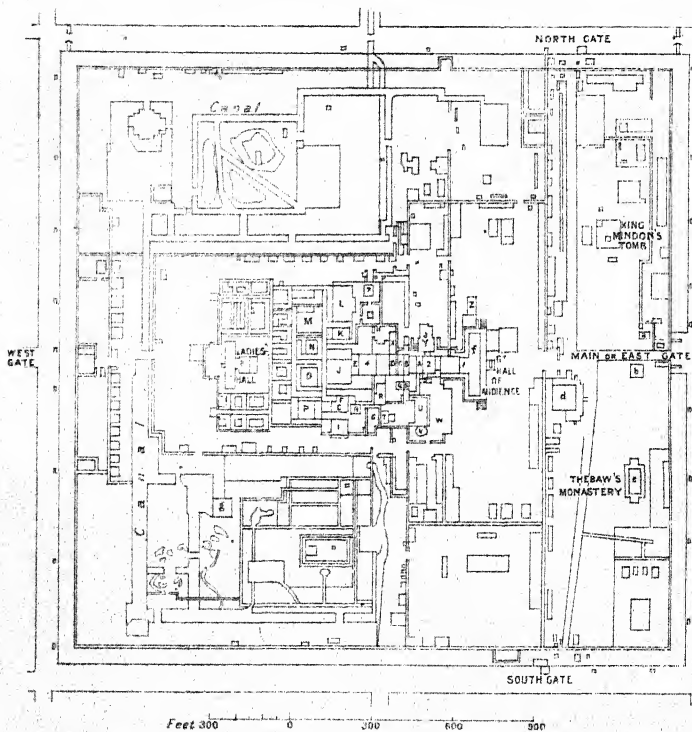
while all remembrance of this gigantic image was lost. The place on which it was situated had become dense jungle, and the image itself turned into what appeared to be a jungle-covered hillock. In 1881 the railway was being constructed, and laterite was required for the permanent way. A local contractor in searching for laterite came across a quantity in the jungle, and on clearing the place uncovered the image, which has become an object of deep veneration. It has been completely restored, and a lofty pavilion has been erected over it. The "Pillars of Victory" in the District Court Compound should be seen.

Just before reaching the Shwethalyaung is seen the *Kalyanisima* or ancient Hall of Ordination in the Zaing-ganaing quarter, founded by King Dhammacheti in 1476 A.D., with ten large stones covered with Pali and Talaing inscriptions. $\frac{1}{2}$ m. W. of the Shwethalyaung is the Mahazedi—a huge pagoda built by Hanthawadi Sinbyuyin about the middle of the 16th century. It was destroyed by Alompra, but the remains are 170 ft. high. It is now being restored. 1 m. S. of the Mahazedi is the *Shwegugale* pagoda with its sixty-four images of Buddha constructed by Siamese architects. About 2 m. down the Rangoon Road lies the *Kyaikpun* pagoda, with four colossal figures, each about 90 ft. high, seated back to back. These represent Buddha and his three predecessors. The best thing to see in Pegu is the golf-course, which is situated on a rising ground to the N.E. of the city, outside the wall. The air is always cool there, and a fine view can be obtained of the Shwehmawdaw and other pagodas and the surrounding country.

From Pegu a line, 121 m. in length, running through Sittang and Thaton has recently been opened to Martaban opposite Moulmein (pp. 639-640).

Joining the mail train, which leaves Rangoon at 6 P.M., the traveller will pass through the *Toungoo* District of Lower Burma during the night, and will in the early morning cross the old British frontier into the Upper Burma District of Yamèthin. From *Toungoo* (166 m. from Rangoon) a motor service leads ordinarily in $2\frac{1}{2}$ hrs. to the hill station of *Thandaung*, 4500 ft. above the sea. It is not a growing place, but has a hotel, *Quisipana*, as well as the comfortable boarding-house *Abbotsford*, and is a good introduction to jungle scenery. He will obtain *chhota khazri* at Yamèthin (R.) (275 m.), the headquarters of the District of that name, and breakfast at Thazi junction (306 m.). From here a branch line to the W. runs to *Meiktila* (14 m.), the headquarters of a Division, and *Myingyan* (7 m.). Between *Pyinmana* (226 m.) and Yamèthin, and thence on to *Kyaukse* is seen the E. the range of hills which divides Burma from the Shan States. In this hill-country, approached by road from Thazi, are *Taung-gyi*, the headquarters of the Southern Shan States, and, at a higher level still, *Kalaw*. Both are increasingly used as hill-stations. *Kalaw* especially is likely to become popular. The *Kyaukse* District is the most fertile in Upper Burma, an ingenious system of irrigation works enabling the cultivator to obtain two crops of rice and sometimes three or four crops (not all rice) annually from the same ground. Here the hills approach much nearer to the railway and *Kyaukse* itself (350 m. R. and D.B. near the railway station, and a well-appointed Circuit House, but no hotel) is picturesquely situated. The *Shwethalyaung* Pagoda on the top of the hill overlooking the railway station was built by King *Anawrattha* about 1028 A.D. There are many old pagodas and remains of old cities scattered throughout

THE PALACE, MANDALAY.



Reproduced, by kind permission of the Secretary of State for India, from the Annual Report for 1902-3 of the Archaeological Survey of India.

- A. } Zetawun Figures of the royal ancestors were kept here.
 B. }
 C. } The King held his morning levée. It is an open passage between two rooms, in the
 D. } Western of which, D, the King was seated with his attendants.
 E. The Glass Palace. The Western half is one large room. The Water-feast Throne
 stands at the West side of the room.
 F. Nursery.
 G. Daily attendance room for Queens.
 H. King and Queen's special living-room.
 I. Kind of drawing-room where the court met to witness theatrical displays in the
 theatre on the south side. The stage is now cleared away.
 J. Originally the Queen's room. Thibaw's eldest child was born here, but Supaya Lat
 never regularly inhabited it.
 K. Tabindaing House.
 L. Seindon House, residence of Dowager Queen.
 M. Northern Palace
 N. Western " } Houses made over to inferior Queens in King Mindon's time,
 O. " } in Thibaw's to Princesses.
 P. Southern " }
 The road running down the centre East and West was called the Samök Road,
 and led to a courtyard called Samök, in the centre of which stood the Lily Throne.
 The houses on the North and South of this courtyard were inhabited by inferior
 Queens in King Mindon's time, and by Princesses in King Thibaw's.
 Q. King's private Treasury.
 R. }
 S. } Quarters of personal Bodyguard.
 T. An evening sitting-room.
 U. Privy Council Chamber.
 V. Observatory Tower. Favourite resort of Supaya Lat; here she watched the British
 troops enter Mandalay.
 W. New house built for, but never used by, the white elephant.
 X. Cut up into various small rooms for tea-making, kitchen, photography.
 Y. Byedaik, or Treasury Office, where Atwin Wuns, or Privy Councillors, sat.
 Z. House for Pwes. The open space east of Z was used for races and various sports on
 horseback.
 a. Clock Tower, where gong and drum sounded the watches.
 b. Also a high tower in which a tooth of Gautama Buddha was enshrined.
 c. King Mindon's Tomb.
 d. Hlutaaw, or Supreme Council Hall (demolished), and Lion Throne removed to
 Calcutta Museum.
 e. Richly decorated Monastery, on the site of which King Thibaw spent the period of
 his priesthood.
 f. Golden Spire over Great Audience Hall.
 g. The South Garden Palace, a kind of picnic house for Thibaw. In the front veranda
 he was taken prisoner by Col. Sladen in November 1855.
 1. Lion Throne, under spire in Great Audience Hall.
 2. Goose Throne, in Ancestral Hall.
 3. Elephant Throne, in the Byedaik.
 4. Bee Throne, in the Glass Palace.
 5. Conch Throne, in the Morning Levée Hall.
 6. Deer Throne, in the South Hall.
 7. Peacock Throne, in the North Hall.
 8. Lily Throne, in Ladies' Hall.

the District but none of great archaeological interest. Shans, with pack caravans, visit Myittha, about 12 m. S. of Kyaukse, and considerable trade still comes through from the Shan States despite the construction of the railway. The train now crosses a stream running to Ava, and, passing through Amarapura, reaches Mandalay (386 m.) at about 3 o'clock.

The express train leaving Rangoon at 11.30 reaches (47 m.) Pegu at 1.18, Toungoo at 1.31, and Mandalay at 7.20.

386 m. Mandalay * station (lat. $21^{\circ} 59'$, long. $96^{\circ} 8'$; altitude 950 ft., D.B.). Several days can be spent very pleasantly at Mandalay. There is only one hotel, situated in 22nd Street, and it is not fit for European guests. Visitors can, however, always be accommodated in the D.B. or in other Government buildings. The city and Cantonment together contain 138,299 inhabitants, mostly Burmese: the city was from 1860 up till 1885 the capital of the Burmese kingdom and the residence of the King. Its growth has been more rapid even than that of Rangoon, but it was in great part due to temporary causes. The city proper was in Burmese times within the walled enclosure, which is now used as a Cantonment and called *Fort Dufferin*.

A traveller bent on studying the capital¹ should commence by ascending *Mandalay Hill*—an isolated mound rising abruptly near the N.E. corner of the fort. From this point of vantage he can see spread out like a great map the town of 138,299 inhabitants,

the fort with the Palace in the centre, the temples and monuments worthy of a royal city, and the system of irrigation built by King Mindon, with its great artificial lake and numerous canals. At the summit of the hill was formerly a wooden temple containing a huge standing figure pointing with his finger at the Palace beneath. This temple and the figure were destroyed after 1885 by fire. The new temple built lately has a covered way to it with an incongruous roof of corrugated iron. A new building has just been erected on the Southern spur of the hill to contain the Buddha relics lately sent over from India. This will form a new attraction for all Buddhists to visit Mandalay.

Fort Dufferin next claims attention. This great square, built to guard the inner city and Palace, with sides $1\frac{1}{2}$ m. long, is enclosed by walls of red brick 26 ft. high, machicolated at the top to serve the purpose of loopholes. They are backed by a mound of earth, so that defenders can look over them. On each of the four sides stand, at equal distances, thirteen peculiar and elegant watch-towers of Burman design, built of teak and freely ornamented with gold. One on the N. side, enclosed and enlarged, forms the nucleus of *Government House*, the residence of the Lieutenant-Governor when at Mandalay. Outside the walls, and surrounding the fort, is a broad Moat full of water, 75 yards wide. It is crossed by five wooden bridges, one in the middle of each side, and an extra one on the W. face which was formerly reserved for funeral processions. It abounds with fish, and at certain seasons of the year large patches of the surface of the water used to be covered with the broad circular leaves and beautiful pink and white flowers of the lotus plants which have their roots at the

¹ The little work, *Archaeological Notes on Mandalay*, by Taw Sein Ko, I.S.O., Superintendent, Archaeological Survey, Burma, contains a scheme for three days' sight-seeing at Mandalay and Amarapura: Superintendent, Government Printing, Rangoon, ans. 8, 1917.

bottom, but the lotus has lately been removed as it was supposed to shelter the malaria mosquito. On this moat in the King's time were several state barges, gilt from stem to stern, some of them propelled by as many as sixty rowers.

There are twelve gates through the fort wall, three on each side, equally spaced. In front of each gate stand a masonry curtain and a massive teak post bearing the name and sign of the gate, which latter is guarded by the stone image of a guardian *nat* placed in a brick shrine. The old Burmese custom of burying alive human victims at the gates of a new city was not, as is sometimes stated, followed here. By King Mindon's order jars of oil were buried instead, and images of guardian spirits were set up in shrines.

Exactly in the centre of the fort stands the royal Palace or *Nandaw*, brought here in the main from Amarapura. A plan showing the disposition of the Palace buildings at the time of the annexation will be found in Mr Oertel's *Notes on a Tour in Burma* (Government Press, Rangoon, 1893). The plan given here is reproduced by permission from the Archaeological Survey Report for 1902-3. The Palace was formerly a square fortified enclosure, defended by an outer palisade of teak posts 20 ft. high and an inner brick wall, with an open esplanade of about 60 ft. width between them. This walled square was cut up into numerous courts surrounded by high walls, and in the very centre, to make it as secure as possible, was an inner enclosure containing the Palace. To the N. and S. of the inner Palace enclosure are two walled-in gardens, containing royal pavilions, and laid out with canals, artificial lakes, and grottoes. The outer stockade, except in a few places, and all the brick walls have now been removed, as also many of the minor

structures; the chief Palace buildings are, however, still standing.

Four strongly-guarded gates led through the outer defences. The large gates were only opened for the King; all other people had to squeeze through the red postern at the side, which obliged them to bow lowly as they drew near the royal precincts. Entering the Eastern gate, which is still standing, one crossed a wide enclosure, which contained a number of subsidiary buildings—such as the armoury, printing-press, mint, quarters for servants and guard, the royal monastery, King Mindon's mausoleum, and the offices of a few of the highest officials. Beyond this was another spacious court in front of the Palace, at the Northern end of which races and sports used to take place before the King. In the centre of this court stands the great Hall of Audience,¹ with the lion throne, projecting out boldly from the face of the Palace, with which it is connected at the back. The private part of the Palace is behind this, on an elevated oblong platform in an inner enclosure, which was entered through two jealously-guarded gates on each side of the Hall of Audience. At the Western end of the Palace platform is a private Audience Hall, with the lily throne, where ladies were received, and between the two Halls of Audience are numerous wooden pavilions, formerly occupied by the various Queens and Princesses. Over the lion throne rises the high seven-storeyed gilded spire or *shwepyathat*, the external emblem of royalty. It has been taken down and restored at great expense.

In the S. garden there was once a small pavilion, on the veranda of which King Thibaw surrendered himself to General Sir H. Prender-

¹ The hall is 250 ft. across from wing to wing, but only 45 ft. deep. S.W. of it at the back was the stable of the White Elephant.

gast and Colonel Sladen on 29th November 1885. At the S.E. corner of the Palace platform is the lofty wooden tower from which the King used to view the city. The richly-carved Pongyi Kyaung to the E. of the Palace, where King Thibaw passed the period of priesthood, is worthy of notice. Hard by is King Mindon's mausoleum, a brick and plaster structure, consisting of a square chamber surmounted by a seven-storeyed spire. Mindon Min was buried here in 1878. The Palace buildings were for a time used for barracks and offices, but they were found unhealthy, and the troops were removed to the new barracks outside. The great Hall of Audience was used by the military as a Church. The Lily Throne Hall and surrounding buildings for some years afforded accommodation to the Upper Burma Club; but this was discontinued in the viceroyalty of Lord Curzon, who feared the risk from fire to this absolutely unique example of the old Burmese Palace built according to the traditional pattern. The necessity of protection is all the greater as experience in Ava shows that Burmese buildings perish in fifty to sixty years when at all neglected.

Pagodas and Monasteries.—The whole neighbourhood of Mandalay, Amarapura, and Ava is rich with splendid fanes. Some of the finest, including the *Atu-ma-shi*, or "incomparable" monastery, have been burnt down within the past few years; but the "730 pagodas" S.E. of the Mandalay Hill remain, and should be visited, as also the **Queen's Golden Monastery** in A. Road and the **Arakan Pagoda**.

Facing the E. gate of the Palace is the Taik Taw Monastery of the Buddhist Archbishop, decorated with wonderful dragons. N. of it, at the S.E. corner of Mandalay

Hill, is the Kuthodaw or **730 Pagodas**—a remarkable work. King Thibaw's father, anxious that the holy books of Buddhism should be recorded in an enduring form, called together the most learned of the priests to transcribe the purest version of the scriptures; this he caused to be engraved on 729 large stones of the same pattern. These stones were set up in an enclosed square, and over each was erected a small domed building to preserve it from the weather. The enclosure is about $\frac{1}{2}$ m. square, surrounded by a high wall with ornamental gates; in the centre stands a temple of the usual form. S. of this stood the *Atu-ma-shi*. W. of this on the road to Mandalay Hill is the **Kyauk Taw Gyi Pagoda**, built over a huge monolithic image of Buddha.

The **Glass Monastery**, so called from the profusion of inlaid glass work with which the interior and exterior are decorated, was close by. The **Glass Monastery** has been burnt down, but close to the remains of the *Atu-ma-shi* Kyaung, which was situated near the Kuthodaw Pagoda, there is the **Shwenandaw Kyaung**, which is worth seeing. It is so called because the materials for the building were obtained by dismantling the apartment occupied by King Mindon Min just before his death. The **Queen's Golden Monastery**, built by Supaya Lat, in A. Road across the railway to Mandalay shore, is the handsomest building of the kind in Burma. It is built of teak in the ordinary form, but is profusely decorated with elaborate carving, and is heavily gilded within and without. The traveller should ask permission from one of the yellow-robed fraternity, of whom he will be sure to find some in the courtyard, to inspect the interior of this monastery. On the road to it the gilded **Eindawya Pagoda**

is passed; and not far from this was the picturesque structure known as the Serpent Pagoda, which was burnt down. To the S.E. of the city is *Maha Muni*, or "*Arakan Pagoda*," rendered especially sacred by the great sitting-image of Gautama there preserved, and on this account regarded by Upper Burmans as not inferior in sanctity to the Shwe Dagon itself. The huge brass image, 12 ft. in height, was brought over the hills from Akyab in 1784. The image was originally set up, so says Shway Yoe, quoting the ancient legend, during the lifetime of the Great Master. The utmost skill and most persistent energy had failed in fitting the parts together, till the Buddha, perceiving from afar what was going on, and ever full of pity, came himself to the spot, and embracing the image seven times, so joined together the fragments that the most sceptical eye cannot detect the points of junction. So like was the image, and so sublime the effulgence which shone around during the manifestation, that the reverently-gazing crowd could not determine which was the model and which was the Master. The resemblance has no doubt faded away with the wickedness of later times, for, unlike most Burmese images, the features of this image are somewhat lacking in the customary refinement and dignity of pose. The shrine in which it stands is one of the most splendid in the country. The image itself is covered by a great seven-roofed *pyathat* with goodly pillars, the ceiling gorgeous with mosaics. Long colonnades, supported on 252 massive pillars, all richly gilt and carved with frescoed roof and sides, lead up to it. All day long circles of constantly-renewed worshippers chant aloud the praises of the Buddha, and the air is thick with the fume of candles and the odours from thousands of smouldering incense-sticks. Within the

precincts of the pagoda is a large tank tenanted by sacred turtle, who wax huge on the rice and cakes thrown to them by multitudes of pilgrims. Probably not even at the Shwe Dagon Pagoda is more enthusiastic devotion shown than here. The relics of Buddha discovered at Peshawar are now in the Treasure-house of this pagoda. It has been decided that the golden casket containing the relics should be enshrined in a temple which has been erected on the S.E. spur of the Mandalay Hill.

The great Zegyo bazar lies near the centre of the city. Grain and vegetable vendors, silversmiths, toy, umbrella, and lacquer makers, silk merchants, and numerous other traders occupy streets of stalls. Burmese ladies in the usual tight-fitting petticoat of gay silk and white jacket, attended by a maid, may be seen making their daily household purchases; groups of girls, with flowers in their hair and huge cigars in their mouths, price the silks of which all Burmans are so fond. Many strangers to the city, come on business or pleasure, wander about deeply interested in the display on the stalls. Nowhere else can be seen gathered together so many widely-separated tribes — Chins from the western mountains, Shans from the E., Kachins from the N., Chinese from the little-known inland borders, Sikhs, Gurkhas, Madrassis, and other Indians, and the scene is as lively as it is uncommon. The bazar deserves several visits, and is, indeed, the best place in Burma for purchasing silks. Curious old specimens of silver work may also sometimes be picked up there. N. of the bazar is the Diamond Jubilee Clock Tower, and the principal shops of Mandalay are in Street No. 22 on this side.

After exploring Mandalay pro-

per, short excursions may be made to Yankintaung, to Amarapura, to Sagaing and Ava, and to Mingun.

The hills called Yankintaung are about 5 m. due E. from Mandalay, and may be visited by motor. There are a number of pagodas and monasteries, and a deep fissure in the ground containing an image of Gautama.

Amarapura, the Immortal city, founded in 1783, the capital till 1860, with an interval of 1822-1837, lies $6\frac{1}{2}$ m. S. of Mandalay, and can be reached by rail or by motor. It is fully described in Yule's *Mission to Ava* and Mr Scott O'Connor's *Mandalay*. Only ruins now remain, but they are well worth a visit. Near the tower of the Palace there was a monster gun, which has now been removed to the Palace at Mandalay; the principal sights are the Shinbinkugyi and Patodawgyi pagodas, within the precincts of which there is now a collection of Burmese inscriptions collected from various parts of the country by King Bodawpaya about a century ago, and a colossal image of Buddha on the shore of the S. lake.¹ The station-master will provide a local guide. Near the station is a fine Chinese Temple. There also may be seen the new Government silk-weaving works, where "Mandalay silks," of colours suitable for European purchase, as well as for Burman, may now be bought.

Sagaing and Ava (7 m. S.E. of Amarapura, the capital of Burma from 1822 to 1837) can also be visited by rail or river from Mandalay. Little trace now remains of the city itself, but on both sides of the river are hundreds of pagodas of every variety and degree of decoration. There are the *Nagayon paya*, the whole building wrought into the form

¹ Mr Bird's book contains many details of these.

of a dragon; the huge round-domed *Kaungmudaw*, built in 1636, and with "glistening white pinnacles or flashing gold spires on the Sagaing Hills, and on the Amarapura side, great massive temples frowning over the river with all the stern solidity of a knightly hold, each with its legend—some tale of bloodshed or piety, some event in Burmese history, or birth story of the Buddha."

Sagaing is now the headquarters of the Commissioner of the Division and of the Deputy-Commissioner of the Sagaing District. The traveller who wishes to explore the pagodas of Sagaing and Ava should endeavour to obtain an introduction to one of these officers. There is a D.B. at Sagaing.

The last of the excursions near Mandalay deserving special mention is that to Mingun, about 9 m. above Mandalay. The up steamers of the Irrawaddy Flotilla Company call there, but the down steamers do not, unless by special arrangement. Mingun is picturesquely situated, and is interesting for its great unfinished pagoda and for its huge bell. The groundwork of the great misshapen Mingun Pagoda covers a square of 450 ft., and its height is 155 ft., about one-third of the elevation intended; but Bodawpaya, who attempted to break the Buddhist record of putting up the most gigantic monument, did not complete it, because a prophecy ran that its completion would portend disaster to his dynasty. In 1838 an earthquake rent the gigantic cube, the largest mass of brickwork in the world, with fantastic fissures from top to bottom, and cast down great masses of masonry, tons in weight. Overlooking the river, in front of the Eastern face of the temple, stood two gigantic leogryphs in brick. These figures were originally 95 ft. high, and each of the white marble eyeballs intended for the monsters mea-

sured 13 ft. in circumference. The leogryphs are now in ruins. N. of the temple, on a low circular terrace, stands the largest bell in Burma—the largest in the world, probably, after the one at Moscow. Its original supports were destroyed by the earthquake of 1838, and it rested on the ground till 1896, when it was again raised, and slung on an iron beam resting on two iron pillars, so that it swings free. An ornamental shed has been erected over it. The dimensions of the bell are as follows:—

External diameter at the lip . . .	16 ft. 3 in.
Internal diameter at the lip . . .	10 ft.
Internal diameter above the lip . . .	4 ft. 8 in.
Exterior height	11 ft. 6 in.
Interior height	12 ft.
Interior diameter at top	8 ft. 6 in.

The thickness of the metal varies from 6 in. to 12 in., and the actual weight is, roughly, 87 tons. There are other curious pagodas in the neighbourhood.

The new railway line from Mandalay to Lashio (180 m.) makes it possible to visit Maymyo and the **Gokteik Viaduct**. Maymyo is now also connected with Mandalay by a motor road, only a 2-hrs. journey and most people travel this way. Maymyo (42 m.) (D.B.), which is 3300 ft. above the sea, is the hill station of Burma. It lies in a trough between low, wooded hills, pretty, but without wide views. There are a large English society, many excellent houses and gardens, a good club with polo-ground, a golf-course and excellent rides in the jungle. The hot weather temperature is fully 20° below that at Mandalay. At Gokteik (23 m.) is a wonderful steel trestle bridge, 320 ft. high and 2260 ft. long, built on a natural bridge of rock 500 ft. high, with a great cavern under it. The bridge was prepared in America, and was put up on the spot by American workmen. There is a Rest-house belonging to the railway near the

station with beautiful views, and the manager of the refreshment-room at Maymyo railway station arranges, at a day's notice, to send up provisions and a cook. The scenery on the way and at Gokteik is fine. It is worth while descending the 900 ft. by a good path to the cavern through which the river flows under the two bridges, *i.e.*, the so-called natural bridge and the viaduct built on it.

The traveller who has time to proceed farther N. may either take one of the Irrawaddy Flotilla steamers, which leave Mandalay every Sunday and Wednesday for Bhamo, or he may take the train. In the latter case he will be able to reach Myitkyina, 724 m. from Rangoon, passing through Sagaing (393 m.), Shwebo (446 m.), Naba junction (592 m.), for Katha (14 m.), and Mogaung (688 m.), the probable point of junction of the projected railway from Assam to Burma. The railway journey from Mandalay to Myitkyina by rail now takes just over 24 hours, meals being obtainable at Shwebo and Naba. No steamers ply between Myitkyina and Bhamo, except Government launches, which do not run on fixed dates, and are not available for ordinary travellers.

About 2 hrs. before reaching Myitkyina by rail, Mogaung is passed. This is the starting-point of the bridle-path to the jade mines, 80 m. to the N.W.

Myitkyina is on the right bank of the Irrawaddy, which in the dry months here runs clear as crystal and contains many sporting fish. To the E. high mountain ranges divide the District from China, the nearest point on the frontier being about 30 m. from Myitkyina as the crow flies. A fairly good bridle track connects Waingmaw on the left bank of the Irrawaddy with Tengyueh.

Many types of hill peoples may be seen in the bazar at Myitkyina. The bulk of the population consists

of Kachins, whose homes are in the hills; the plains are as yet sparsely populated, but are gradually attracting settlers. The climate at Myitkyina from the middle of November till the end of February is delightful, and English flowers, fruit, and vegetables thrive. The P.W.D. Inspection Bungalow is available for the use of travellers when not required by officials, but visitors must make their own arrangements for food. The town itself presents no special features of interest.

The steamer route to Bhamo and back (2½ days up and 1½ days down) is recommended. The steamers are well fitted, and the scenery is fine. Passing Singu on the right and Sheinmaga and Kyaukmyaung on the left, the steamer passes through the third defile to Thabeikkyin and Kyanhnyat. Tigyaing, on the left bank, is prettily situated on a hill. Katha is next passed on the left. It is the headquarters of the District of that name, and a daily steamer to and from Bhamo (70 m.) may be joined or left there by the railway. The pagodas of Shwegu next come into sight on the right, and on Royal Island in the river, and the steamer then passes through the second defile to Bhamo.

The defiles of the river as Bhamo is approached are very fine. The wide stream narrows to 1000 yds., and flows for 30 m. through a chain of hills covered with splendid foliage. The successive reaches of the river resemble lakes, being apparently shut in all round. Beyond the first hills is a plain, and then another defile through a second chain of hills, which is even finer than the last. The river narrows to 200 or 300 yds., and rushes through the gap with great velocity. This defile extends for 5 m., and in one place a rock rises straight out of the water to a height of nearly 400 ft.

There is not much to be seen at Bhamo (population 9762—Burmans, Shans, Chinamen, Kachins, Indians, and every sort of intermixture), but the place is of interest as being the highest station on the Irrawaddy held by British troops and the starting-point of the main trade route into China, the nearest point on the Chinese frontier being only some 30 m. distant. The Theindawgyi Pagoda resembles those of Siam in shape, and a Chinese Joss-house will be interesting to those who have not seen the farther East. "Antiquarians will also find interest in the fact that just outside Bhamo is the site of the old city of Sabenago, of which bits of the old walls still remain. Sabenago is probably the place referred to in Fra Mauro's map as the place where "goods are transferred from river to river and so pass on to Cathay." Several trade routes from Yunnan converge on Bhamo. In 1915-16 the value of the trade, passing through Bhamo and registered, amounted to 153 lakhs—imports 96 lakhs, exports 57 lakhs. The Bhamo District is largely inhabited by Kachins, wild hillmen, who in Burmese times were practically independent; and were a constant source of terror to the caravans passing between Bhamo and China. The Kachins have long been reduced to order.

Proposals have often been mooted for the construction of a railway 124 m. long from Bhamo to Tengyüeh or Momein. There are at present no signs that the Government of India are willing to undertake the burden of so expensive, though politically important, a project.

In order to visit the *Ruby Mines* it would be necessary to break the journey between Mandalay and Bhamo at Thabeikkyin, in the Ruby Mines District. A good road connects Thabeikkyin with Mogok (60 m.), and the journey is well

worth undertaking. There is a daily motor service running through in 7 hrs. The road passes through fine mountain scenery, and the journey can be broken at D.Bs. at intervals of 12 m. Fifty m. from Thabeikkyin the road crosses a pass 5000 ft. high and descends into the Mogok Valley, in which the mines are situated, which forms a cup in the hills about 10 m. long by 2 m. broad. The mines are worked partly by the Ruby Mines Company, with the assistance of the most modern methods and machinery, and partly by a large number of native licensees, who work hand mines by primitive methods. In the Company's mines the system followed is one of open workings. Some thirty Europeans and Anglo-Indians, and a very large number of Burmese and Shan-Chinese are employed on the works in the various processes of mining, washing, and sorting. The Company's mines are lighted and their machinery run by electricity. By arrangement with the Indian Government the Company secured a lease for 28 years in payment of a minimum rent of Rs.200,000, and a royalty of 30 per cent. of the net profits. The annual out-turn of rubies varies from 266,000 to 325,000 carats. The Company has recently extended its workings to Luda and Kathe 7 m. from Mogok on the road from Thabeikkyin. Besides rubies, sapphires, topazes, amethysts and several other stones, both uncut and polished, are to be had.

About 50 m. above Thabeikkyin Tagaung is reached on the bank of the Irrawaddy, one of the oldest and most important capitals of Burma, sometimes spoken of as old Pagan. As Tagaung ceased to have any importance some hundreds of years ago, there are no ruins to be found, though the mounds in the marshes near it will probably in the future yield

important results to the antiquarian.

Within easy access from Mogok, Thabeikkyin, or Tagaung (D.B. at each, with caretakers and food) there is good big-game shooting—leopards, tigers, elephants, *saing*, bison, and *sambhar*; but the country is difficult and, during the rains, malarious.

Having returned to Mandalay, the traveller should proceed by Flotilla steamer to Prome (express steamer twice a week—three days), stopping *en route* at Nyaungu for Pagan, and at Yenangyaung for a visit to the oil-wells. After passing Sagaing, the headquarters of the Sagaing Division, the steamer calls at Myingyan and Pakokku, both large towns and headquarters of British districts. The former is the terminus of the branch railway from Thazi junction, and is an important trading centre, especially in cotton. The latter is the base for the Chindwin River and the Chin Hills. Both are thriving and growing towns.

Nyaungu is situated about 120 m. below Mandalay, on the Eastern bank of the river, and is interesting both as being the principal place for the manufacture of the celebrated Burmese lacquer work,¹ and as being the nearest halting-place to Pagan, the capital of Burma from the 2nd to the 13th century. There is a small Government Circuit House at Nyaungu, and a large one at Pagan, near the principal pagodas. Permission to occupy these should be obtained from the Deputy-Commissioner at Myingyan. Messing is arranged for at the Pagan Circuit House, which is 5 m. from the steamer landing-place at Nyaungu, and can be reached by bullock-cart or country

¹ A full description of the process of manufacture will be found in chapter 27 of *The Burman*, by Shway Yoe.

boat. The traveller who wishes to make anything like a detailed examination of the extensive and very interesting remains in the immediate neighbourhood should arrange to remain at least two days in each. A pretty full description of the pagodas at Pagan will be found in Yule's *Mission to Ava*, in Bird's *Wanderings in Burma*, in Scott O'Connor's *Mandalay and other Cities of Burma*, and in the publications of the Burma Archaeological Department. A very brief account (taken chiefly from Yule) of some of the principal monuments is all that can be given here.

The Pagan ruins¹ extend over a space about 20 m. in length along the river, and averaging about 5 m. in breadth. The brick rampart and fragments of an ancient gateway, showing almost obliterated traces of a highly architectural character, are the only remains which are not of a religious description. It is said that in the days of the glories of Pagan there were nearly 13,000 pagodas and monasteries. The remains of over 5000 can still be traced. All kinds and forms are to be found among them; the bell-shaped pyramid of brickwork in all its varieties; the same raised over a square or octagonal cell containing an image of Buddha; the bluff knob-like dome of the Ceylon dagobas; the fantastic *Bupaya*, or Pumpkin Pagoda, and many variations on these types. But the predominant form is that of the cruciform, vaulted temple. One hundred and thirty-six of these pagodas are under the custody of Government *darwans*, and the more important—N., Kaukka-than; E., Gawnagôn; S., Kathaba; W., Gautama—are kept in repair by the Public Works

Department. The three principal temples are the Ananda, the Thatbyinnyu, and the Gawdawpalin, all close together near the S. side of the city and nearly 5 m. distant from Nyaungu. The Ananda, as will be seen from the annexed plan, is a square of nearly 200 ft. on each side, with projecting portions on each face, so that it measures 280 ft. across each way. It is seven storeys in height; six of these are square and flat, each diminishing in extent, so as to give the whole a pyramidal form; the seventh, which is, or simulates, the cell of the temple, takes the form of a Hindu or Jain temple, the whole in this instance rising to the height of 183 ft. Internally the building is extremely solid, being intersected only by two narrow concentric corridors; but in rear of each projecting transept is a niche, artificially lighted from above, in which stands a statue of Buddha more than 30 ft. in height. These four great statues represent the four Buddhas who have appeared in the present world period—viz.: E., Kaukka-than; W., Kathaba; N., Gautama; and S., Ganugun. They are all richly gilt. The Ananda was built in the 11th century, in the reign of Kyanzittha. The name is perhaps derived from *Ananda*, the favourite pupil of Buddha, or more probably from *nanda*, meaning "admirable," the prefixed "A" being only an intrusion (see Fergusson's *Ind. Arch.*, 2, 360).

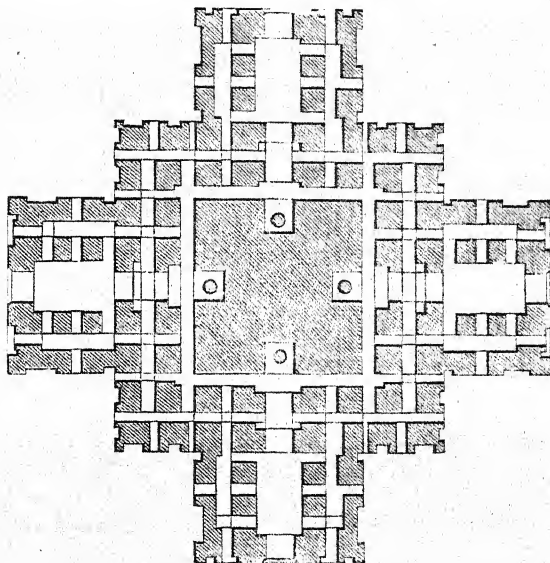
Next in importance is the Thatbyinnyu (the Omniscient), erected about the year 1100 by the grandson of Kyanzittha, and third is the Gawdawpalin (Throne of the Ancestral Hall) built in 1200. These two temples are of very similar form, but the Thatbyinnyu is considerably larger. The height of the Thatbyinnyu is 201 ft., that of the Gawdawpalin 180 ft. They

¹ A museum of remains discovered at Pagan has recently been established in the precincts of the Ananda Pagoda.

differ from the Ananda in having each only one porch, instead of four, and consequently only one great statue in its cell instead of four standing back to back. A plan of the Thatbyinnyu is given below.

Another important temple within the city walls is known as the *Maha Bodhi*, and was erected about 1200 by King Nandaungmya. It is different in style from

a huge reclining image of the Buddha; the Nagayon, in which the "Nagas" guarding the figure indicate the influence of snake worship on the Buddhism of the period; the Nanpaya, where the captive Talaing King Manuha was in Nawrata's reign allowed to hold a subordinate court, and which contains representations of Brahma with the triple head; the Mingalazedi, noted for its



Plan of the Ananda Temple (from Yule). Scale 100 ft. to 1 in.

the other temples. The basement is a quadrangular block of no great height, supporting a tall spire, strongly resembling the original temple of Buddh Gaya (p. 51). Both base and spire are covered with niches, bearing seated Gautamas and interspersed with ornamental panels and mouldings.

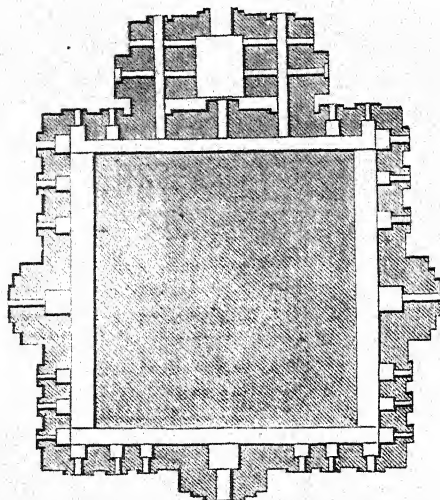
Among other temples the more interesting are a monastery in the Ananda containing frescoes; the Manuha Pagoda, which contains

glazed tiles depicting scenes in the previous existence of Gautama. For further details a guide to Pagan, which has been prepared by the Archaeological Department, should be consulted. The excavations round the *Pet leik paya* have brought to light a series of Buddhist terra-cotta reliefs. There is a local museum of these and other remains at the Ananda. Between Pagan and Nyaungu, on the road which follows the river, is the fine Shwe-

zi-gon Pagoda, near which many workers in lacquer reside: the surroundings are extremely picturesque. $2\frac{1}{2}$ m. N. of Nyaungu by a bad road is the Kyaukku Temple. This is built in three terraces; the hall in the centre of it contains a statue of Buddha, which, like the decoration of the temple, is of Indian type. Pagan fell in 1284 A.D. The Emperor of China sent a vast army to avenge

view of the sacred city obtained from the steamer is particularly fine.

Continuing his course down stream past Salemyo, the traveller will shortly reach Yenangyaung, on the E. bank, and here again, if time allows and the necessary arrangements have been made, a halt is desirable. The oil-wells are situated about 3 m. from the river-bank, and well deserve a



Plan of Thatbyinnyu (from Yule). Scale 100 ft. to 1 in.

the murder of an ambassador. The Burmese King pulled down 1000 pagodas, 10,000 smaller ones, and 4000 square temples to build additional fortifications from Palin on the N. to Ywatha on the S., but a prophecy found under one of the desecrated shrines robbed him of his courage, and he fled to Dala on the S., and Pagan was sacked by Kubla Khan's warriors, and never recovered its pristine splendour and magnificence.

The Irrawaddy just below Pagan widens out like a gigantic lake to over 2 m. in breadth, and the

visit. Oil-winning by primitive Burmese methods is still practised, but in recent years several Companies, the largest being the Burma Oil Company, have acquired sites on the field, and by adopting the American system of wells, drilled to a depth of over 3150 ft., have obtained an enormously increased production. The output of oil in 1915 was 198,809,315 gallons, and the royalty collected by Government in the same year, Rs.2,485,100. Mr Pascoe's report on the oil-fields of Burma (*The Geological Survey of*

India, Vol. XL., Part 1., published by Kegan Paul, Trench, Trübner & Co.) contains full details. There is a P.W.D. Bungalow at Thitabwe near the steamer landing-place, and a District Bungalow at Yenangaung.

The principal places of call below Yenangaung are Magwe and Minbu, both headquarters of British districts, and the former headquarters of the Division of that name. At Minbu there are interesting mud volcanoes, situated about 2 m. from the river-bank.

At Minhla there was an old Burmese fort, the scene of a brief fight in the last Burmese war. Soon after crossing $19^{\circ} 29' 3''$ parallel of latitude (the old frontier formerly indicated by masonry pillars and inscriptions, specimens of which may be seen in the office of the Deputy-Commissioner, Thayetmyo) the cotton-mills of Allanmyo may be seen on the left, recently erected to cope with a growing industry. On the right, almost opposite, another mill will be noticed, and a little S. of it the old British fort, now part of the large camp for Turkish prisoners of war which was established in the Thayetmyo Cantonment in 1915.

Thayetmyo (D.B.), like Toungoo, is an old frontier station. The troops now consist of one company of British Infantry and some garrison companies of Indian troops guarding the camp.

There is an excellent 9-hole golf-course in Cantonments, which is one of the two courses mentioned in Nisbet's *Golf Year-Book*. (Visitors as.8 per diem; Sunday play without caddies. Apply to Honorary Secretary.)

As the Promé-Thayetmyo ferry steamer is always in Thayetmyo throughout Sundays, passengers by the down mail steamer arriving

in Thayetmyo about noon on that day can tranship to the ferry steamer, which leaves for Promé at 1 P.M. on Monday, thus getting twenty-four hours in perhaps the prettiest station in Burma. The park-like land S. of the fort is a portion of the old Cantonments.

There is also accommodation at the D.B., with fair cooking, and conveyances can be procured at reasonable rates from the local job-master.

From Thayetmyo the scenery is pleasing, and Promé (161 m. by railway from Rangoon) is reached in 4 hrs. The traveller has here the option of leaving the steamer and taking the rail to Rangoon (9 hrs.), arriving in time for early breakfast next morning.

From Promé to Rangoon the river journey takes three days.

Promé town (population 27,375), the headquarters of the district of the same name, is situated on the E. bank of the Irrawaddy River (161 m. by railway from Rangoon). The town is well laid out with streets, the old town having been entirely destroyed by fire in 1862. The Strand Road extends from one end of the town to the other, and from it well laid-out streets run E., intersected at right angles by others. Close to the centre of the town are the Court Houses, the Anglican Church, the School, the Hospital, the Jail, the Market, the Jubilee Clock Tower, and the Post and Telegraph Offices. The Municipal Waterworks, opened in 1885, supply the town with water from the river. Most of the residences of officials are on the hill just to the S. of the town, which is accessible by a good metalled road, and affords a fine view of the town and neighbourhood.

It is a very ancient city, and is mentioned as the capital of a great Kingdom before the Christian

era. The original capital was Thakethetaya, 5 m. or 6 m. inland, but this was destroyed by the Talaings in the 8th century, and after its destruction the existing town of Prome was founded. It was one of the chief centres round which the early people of the country struggled for the mastery of Burma. In the war of 1852 it was captured and occupied by the British, out of whose hands it has not passed since. The principal industries are the manufacture of silk cloth, gilt boxes, and lacquer-work. The chief objects of archaeological interest are two pagodas—Shwesandaw in Prome town and Shwenattaung 16 m. from it.

The Shwesandaw Pagoda is on a hill $\frac{1}{2}$ m. from the left bank of the Irrawaddy, and covers an area of 11,925 sq. ft., rising from a nearly square platform to a height of 180 ft. It is surrounded by 83 small gilded temples. These unite at their bases and form a wall round the pagoda, leaving a narrow passage between it and them. There are four approaches to the platform on which the pagoda stands. The N. and W. are covered in with ornamented roofs, supported on massive teak posts, some partly gilded and partly painted vermilion. The platform on the top of the hill is being repaved with slabs of Italian marble, and round its outer edge are carved wooden houses, facing inwards, interspersed with small pagodas, in which are figures of Gautama standing, sitting, or lying. Between these and the main pagoda are many Tagundaing posts with streamers, and the largest collection of bells in Burma, some of them of great antiquity. The pagoda has two gigantic lions of conventional form at the N. entrance. In 1753 A.D. this pagoda was regilt by Alompra; in 1841, King Tharrawaddy had it repaired and regilt,

and surmounted with a new *ti*, or crown of iron, gilt and studded with jewels; in 1842 the carved roofs over the N. and W. approaches were put up by the Governor. In 1858 the pagoda was again put in repair at a cost of Rs.76,800, raised by public subscription, and subsequently it was regilt at a cost of Rs.25,000. In 1916, two new *tis*, with the usual costly ornamentations valued at about a lakh of rupees, were substituted for the old Burmese and Talaing *tis*, the frameworks of which are now to be seen in a building on the platform. Through the efforts of a local religious association the pagoda is now lit by electricity. The annual festival, when the pagoda is visited by thousands of pious Buddhists, is held in November.

The Shwenattaung Pagoda.—

This pagoda, 16 m. S. of Prome, richly gilt and glittering in the sun, stands out conspicuously on the first hill of a low range, overhanging the Shwenattaung plain, and has in a line behind it several other pagodas, all of which may be visited by the traveller, if not already tired with buildings of the kind. The Shwenattaung is said to have been built during the reign of the founder of Prome by his Queen. It was repaired and raised by Thihathu, King of Prome, and again in the 16th century by Tabinshweti, King of Toungoo, who had conquered Prome. Its eight-day festival in March is attended by thousands. The pagoda can ordinarily be reached from Prome by motor. There is no accommodation for travellers at Shwenattaung and the vicinity.

The mail train leaves Prome at 9.30 o'clock at night, and reaches Rangoon at about 6 o'clock on the following morning. The Irrawaddy Flotilla Company provide a daily service from Prome to Thayetmyo and from Prome to

Henzada, and a tri-weekly service from Prome to Rangoon and from Prome to Mandalay, stopping at the river-side stations.

The only accommodation for travellers at Prome is a small travellers' bungalow, at which meals can be obtained.

ROUTE 2.

From RANGOON to MOULMEIN, with possible extension to Tavoy and Mergui.

Moulmein (population 57,582), justly described in *The Silken East* (V. C. Scott O'Connor) as the most beautiful town in Burma, should on no account be missed. It is comfortably reached from Rangoon by railway to Martaban (11 hrs.), and thence by ferry steamer ($\frac{1}{2}$ hr.). For the steamer service the B.I.S.N. Co.'s Agents, Bullock Bros., Rangoon, or T. Cook & Sons, should be consulted.

As a British settlement Moulmein dates from the year 1827, when it was selected by General Sir Archibald Campbell as the capital of the newly-acquired Tenasserim Province. It is the headquarters of the Tenasserim Division and of the Amherst District, ranks next to Rangoon for its trade in teak and rice, and, with its flourishing rubber plantations to the S., bids fair to be an important centre of the rubber industry. The District promises to be the centre of a tin and wol-

fram industry. A grass from which oil is extracted is largely grown in the neighbourhood of the town.

The visitor entering the Salween from the Gulf of Martaban finds the banks covered with the most varied of evergreen foliage, in marked contrast to the low-lying muddy flats that line the mouth of the Irrawaddy.

Right and left, parallel with the river, are low ranges of hills dotted with pagodas, while to the N. and N.W. beyond the town the precipitous mountain Zwëgabin Daung, known locally as the Duke of York's Nose, and the Zingyaik range stand in bold relief against the sky. Moulmein is 38 m. from the sea, and takes the form of an inverted "L," four-fifths of the town, or the portion representing the perpendicular, lying along the left bank of the Salween, flanked on the E. by a low, irregular, pagoda-crowned ridge, and the short horizontal line representing the Daingwunkwin quarter on the N. stretching along the left bank of the Gyaing River to its junction with the Salween.

The view from the Kyaikthanlan Pagoda at the N. end of the ridge is unsurpassed in all Burma, and is thus described in *The Silken East* :—

"From the S.W. angle there is unfolded a picture of a wide river making its last progress in loops and curves to the sea. Enthusiastic people say it is as fine as the harbour of Sydney. At some distance from the river a long, low line of hills runs down on the E., and another, the nucleus of Bilugyun, runs along the W., a rampart for the retreating sun. The river enfolds in its course several large, low-lying islands, and at one point at Mupun it makes a beautiful curve, ending in a headland where rice and timber mills send their smoke into the air, and ships at the harvest

season wait for their cargoes to the distant world.

"Looking more directly to the W., there is the river again in a straight bar of gold under the long town of Moulmein. More ships lie here, and they look to me as if they had dropped without explanation from the great world outside into this landlocked anchorage under the swooning palms. For as I look the conviction is borne in upon me of a drowsy land of extraordinary beauty, but not of a modern city, and the ships that lie here for a season seem to me to form no part of it. Looking a little more towards the N., my eyes are greeted by the Zingyaik Hills, whose loftiest peak, 3000 ft. in height, dominates the whole panorama. Between these hills and Bilugyun the right branch of the Salween makes its way to the sea. In times gone by—in the days of the castle of Murmulan, when Portuguese artillerymen manned the guns of Martaban, and hungry adventurers from the W. swept in their galleons up the gulf—and down even to more recent times, *this* was the main channel of the river."

And to complete the picture from the description of another writer:—

"E., at the foot of the ridge, is the large and regularly laid-out Daingwunkwin quarter on the edge of a rice plain, from which beyond the Attaran River rise isolated fantastically-shaped ridges of limestone, in part bare, and elsewhere with jagged peaks partly concealed by stunted tree-growth, and in the extreme distance the faint blue outline of the lofty forest-covered Dawna range on the Siamese frontier.

"To the N. is the Zwëgabin range of jagged limestone peaks, 13 m. long, while to the S. rise the dark Taungwaing Hills, their sombre colour relieved by the glistening white pagodas with which they are dotted, while wind-

ing through the plain E. and S.E. like silver bands are the Gyaing and Attaran.

"This magnificent panorama can only be seen in perfection up to the middle of January: thereafter heat-haze partly obscures the view to the N. and E."

The two pagodas worth visiting are the Kyaikthanlan at the N. end of the ridge and the Uzina in the centre.

The Kyaikthanlan, 152 ft. high and 37½ ft. in circumference, was founded many centuries ago on the site of a former pagoda destroyed by the Siamese in one of their periodical invasions: hence the name in the Mon language, still spoken in the neighbourhood of Moulmein, *Kyaik Sem Lum*, the pagoda* which the Shans destroyed. Visitors should notice the big bell with quaint English inscription—"This bell is made by Koonalenga, the priest, and weighs 600 viss. No body design to destroy this Bell: Moulmein, March 30th, 1855. He who destroyed to this Bell, they must be in the great Heell, and unable to coming out." On the platform of the Uzina Pagoda are some remarkably well-carved, life-size figures representing the four objects the sight of which determined Gautama to become a hermit—a decrepit old man leaning on a staff, a man suffering from a loathsome disease, a putrid corpse, and a recluse in yellow garments, with features expressive of resignation and absence of worldly care.

Moulmein is noted for ivory carving, and a visit should be paid to the shop of Maung Ni Hla, the principal craftsman in Nyaungbinzeik Road, Daingwunkwin.

The jail saleroom occasionally has good specimens of wood-carving, and is worth a visit; My Po Wet's showroom of locally-carved furniture should be seen, while the Kaladan bazar is worth a prolonged visit, for all sorts of

curios can be obtained by experts in collecting. Chinese and Siamese silks are purchasable at reasonable prices. The Municipal Secretary will furnish visitors with a list of the principal ivory carvers, silversmiths, etc. A visit should also be paid to one of the timber mills to see the elephants working.

The following excursions should not be omitted:—

(1) By steamer (5 hours; Irrawaddy Flotilla Company and Burma Steam Launch Company maintain daily service) to Pagat, thence 2 m. inland to the Kawgun caves. In one there is a subterranean lake, and a Burman canoe takes the traveller right through the heart of the hill, a weird passage of some 600 yds., in pitchy darkness.

Another cave is thus described in *The Silken East*: "Masses of rock running parallel to the cliff's face make the outer wall of the first chamber. Ten thousand images of the Buddha lie within the first sweep of the eye, from yellow-robed figures which line the footpath to terra-cotta plaques fixed high on the jutting face of the cliff; from golden colossi twice the height of Goliath to miniature figures fit for a pen-wiper. A great stalagmite rising up from the floor to near the brow of the overhanging cliff is completely covered with small images of the Buddha enthroned, and its summit is crowned by a small pagoda." If the traveller returning to Pagat will, before sunset, take his stand on the river bank $\frac{1}{2}$ m. N. of the village, he will see one of the most extraordinary sights in the world: precisely at sundown the bats issue in myriads from a narrow cleft in the cliff overhanging the river and take their flight S. towards the sea. To quote once more from the same book:—

"Yet one more sensation remains to complete the bizarre suggestions of the day. For as I near the

gateways of Pagat I am startled by the sound of a great flight of birds, a sound as of grey geese on the wing, but of such volume as can proceed only from a great host. These are the bats of the Pagat caves.

"For more than twenty minutes they sweep out in a long swift line that grows tortuous as it recedes, and as far as I can see into the ruddy twilight the line extends. Swiftly as each creature in it is flying, it looks in the distance like a smoke spiral waiting for a wind to blow it away. They go every evening, say my boatmen, to drink the salt water of the sea; and they cross in their flight the crests of the Zingyaik Hills."

(2) From Pagat to Pa-an (8 m.) and on to Shwegun (35 m.) by the same daily service of steamers noted above. The scenery is fully equal to that on the upper defiles of the Irrawaddy. There are furnished Government bungalows at Pagat, Pa-an, and Shwegun; but the visitor must take his food, bedding, and servants, unless he omits Pagat and Pa-an and sleeps on board the steamer at Shwegun.

(3) Moulmein to Kawhnat monasteries (8 m.). There is a service of steam launches several times a day to Kado, and thence it is a shady walk of $\frac{3}{4}$ m. through Kado and Kawhnat villages to the monastery, where are to be seen perhaps the finest specimens of *their* architecture in the whole of Burma, as well as a magnificent collection of ivory carvings. A brief descriptive guide-book to these buildings has been prepared, and copies can be borrowed from the Deputy Commissioner of Amherst or the headman of Kado.

(4) Moulmein to the Hpayōn (commonly called The Farm) caves—distance, 9 m.

The best way of doing the trip is to take a hackney carriage or motor-car to the Nyaungbinzeik ferry on the Attaran (4 m.), and thence by bullock-cart; or, if a

full day's notice is given to Lamb's Livery Stables, arrangements can be made to send a hackney carriage to be in waiting on the right (E.) bank of the ferry. The caves are situated in isolated hills of limestone, which rise picturesquely and abruptly out of the surrounding alluvial plain. They were evidently excavated by the sea. The first consists of an entrance hall running parallel with the face of the rock, a long chamber running into the rock at the S. end, and a subsidiary entrance and hall at the N. end. Along these halls run brick platforms covered with images of Gautama and his worshippers. The second cave, which is best worth visiting, is $\frac{1}{4}$ m. to the S., and access is gained by a steep path for some 30 yds. to a small opening in the cliff face. To properly explore the enormous cavernous recesses, with their stupendous stalactites and stalagmites, it is necessary to come provided with a supply of blue, light illuminant, which can be obtained at any of the numerous chemists in Moulmein. Visitors would also do well to carry umbrellas, as bats swarm.

(5) Moulmein to the Moulmein Rubber Plantation Company's estate at Kwanhla (38 m.)—Manager Major Bradley, to whom notice of a visit may be given by wire. The journey can be made in 2 hrs. by motor hired on good notice from Mr Mitchell, Moulmein Ice Factory, Maingay Street.

In the Kwanhla and the adjacent Kyonkadat estate (Amherst Plantation Company) trees can be seen in all stages of growth up to 13 years. The soil is declared by Straits experts to be equal to the best Straits. The Kwanhla estate is said by experts to be one of the best-managed estates in Burma. Thousands of acres of similar land await development in the neighbourhood.

(6) Moulmein-Kyain Seikgyi—

a whole day by steam launch (daily service by the Irrawaddy Flotilla and Burma Steam Launch Companies). The trip can be continued to Amherst, a most attractive seaside resort (the Deputy Commissioner should be asked for accommodation in the bungalow).

At Kyain Seikgyi and Natchaung there are furnished Government bungalows, but food, bedding, and servants must be taken.

From Moulmein the traveller may, if he pleases, extend his journey to Tavoy (wolfram-mining) and Mergui (pearl-fisheries), to which places the B.I.S.N. Company ran a weekly steamer before the War. Unless, however, he is proceeding to the Straits, he will probably find that his journey will occupy more time than he can devote to it. Railways are projected to Ye and Tavoy in one direction and to Myawaddy on the Siamese frontier in another. Tavoy, the headquarters of the District of that name, is a town of 25,074 inhabitants, on the Tavoy River, about 30 m. from its mouth. It is laid out in straight streets, and the houses are for the most part built of timber. To the E. and W., ranges of hills run nearly due N. and S., and the surrounding land is under rice cultivation. Tavoy contains court-houses, a custom-house, a Chinese hotel, and the usual public offices, besides numerous pagodas and monasteries of no special interest. Its trade, except in minerals, is of little importance, and is carried on chiefly with ports in Burma and the Straits Settlements.

Valuable minerals—viz., wolfram and tin—have in late years been discovered (the former in large quantities), and prospecting operations are being carried on vigorously. Some 8201 tons of wolfram ore and 143 tons of tin ore have been extracted between

1913 and 1916, and it seems probable that the District will have an important future as a mining centre. Burma's important contributions to the European War have consisted of wolfram from Tavoy for the speeding-up of munitions, and of earth-oil from Yenangyaung for supplying the Grand Fleet in the North Sea with oil-fuel.

The trip from Tavoy to Mergui is interesting, inasmuch as it passes through the Mergui Archipelago—a large group of islands which, commencing in the N. with Tavoy island, stretches southwards beyond the limits of British territory in Burma. They have been described as “a cluster of islands and islets with bays and coves, headlands and highlands, capes and promontories, high bluffs and low shores, rocks and sands, fountain streams and cascades, mountain, plain, and precipice, unsurpassed for their wild, fantastic, and picturesque beauty.” They are but sparsely inhabited, and are the resort of a peculiar race, the Salons, who rarely leave them to visit the mainland. The principal products are edible birds' nests and *bêches de mer*. The islands are infested by snakes and wild animals. Mergui itself, the chief town of the district of that name, stands on an island in the principal mouth of the Tenasserim River, which falls into the Bay of Bengal about 2 m. N. of the town. It has a population of 14,976, consisting of many races. It has acquired additional importance from the discovery of valuable pearl-beds in its vicinity. Mining for tin and wolfram is carried on throughout the district, while the rubber plantations are attracting considerable interest and capital. The traveller who can spare the time should inspect the pearl-diving and the mining operations. The town itself con-

tains little of special interest. The harbour is formed by Pataw Island lying between the town and the sea. The D.B. in Mergui town has accommodation for four travellers. There are no hotels.

A fortnightly steamer runs between Mergui and Victoria Point, and a bi-weekly launch between Palaw and Tenasserim. Travelling by country-post is practicable throughout the year.

From Letpadan (84 m. from Prome, 77 m. from Rangoon) a branch line runs to Henzada ferry (32 m. distant) and (83 m. farther) to Bassein (Route 4). 9 m. S. of Letpadan on the main line is Tharrawaddy, which is the headquarters of the Tharrawaddy District (2851 sq. m.; population 433,320). It lies between the range of hills known as the Pegu Yoma on the E., the Irrawaddy River on the W., the Prome District on the N., and the Insein District on the S. Its centre is traversed by 70 m. of the Rangoon-Prome Railway. Also the Myit-maka River, farther Southward, known as the Hlaing, or Rangoon River, traverses the District, which is mainly agricultural. It contains extensive forests on its Eastern side; teak and other timber are extracted by Government agency.

The history of the Tharrawaddy District presents no features of special interest. It was separated from the Henzada District in 1878, until which year Henzada and Tharrawaddy had formed a single District. At Myodwin, 8 m. from Gyobingauk railway station, there are the remains of a fort built three centuries ago by a Prince named Thadomingaung, or Thônmyoyin (*i.e.*, lord of three towns), to whom at that time Paungde, Tharrawaddy and Toungoo owed allegiance. The District formed part of the Talaing Kingdom of Pegu and became Burmese when Alaungpaya conquered Pegu in 1753. In the first half of the 19th century it was part of a

fief of the prince who, by deposing his brother from the Burmese throne, became King of Burma as the Tharrawaddy Min, or the Shwebo Min, and reigned from 1837 to 1846. The District has long held an unenviable reputation on account of the criminality of its inhabitants. The towns of Thonze, Letpadan and Gyobingauk are administered by Municipal Committees, and Minhla, Zigon, and Nattalin by Town Committees. The District comprises two subdivisions, with three townships in each.

There are Inspection Bungalows at all township headquarters and principal railway towns : but, wherever he stays, the traveller must be prepared to make his own arrangements for food.

ROUTE 3.

RANGOON TO KYAUKPYU and AKYAB.

The traveller who desires to see something of the Arakan Division, or who is proceeding from Rangoon to Calcutta, and has a week to spare, may proceed by B.I.S.N. Company's steamer (weekly) to *Kyaukpyu* and *Akyab*, calling (except in the monsoons) at the mouth of the beautiful Sandoway River.

Kyaukpyu is the headquarters of the District of that name. It was formerly a British Cantonment, but the troops have been withdrawn, and it is now a place of little interest or importance. It

is situated in the N. of Ramri Island, and the town lies close to the seashore, upon a sandy plain, bounded on the S.W. by a low range of sandstone hills, which breaks the severity of the monsoon. The whole tract is lined with mangrove jungles, and the place is very unhealthy. It is considered to be more feverish than before. The town contains the usual public buildings, but nothing of special interest.

Akyab is a place of more importance, and is the headquarters of the Arakan Division and the third seaport of Burma. Originally a Magh fishing-village, *Akyab* dates its prosperity from the time when it was chosen as the chief station of the Arakan Province at the close of the First Burmese War (1826). It has now a population of 37,893. It contains the usual public buildings and several large rice-mills. A pleasant excursion may be made to *Myohaung*, the ancient capital of Arakan, 50 m. up the *Kaladan* and *Lemro* Rivers, where the remains of the old town are still to be seen. For a description of them reference may be made to the reports of the late Dr Forchhammer, which were issued by the Burma Government Press in 1891. The ruins of the ancient fort, with traces of the massive city wall and the platform on which the old Palace stood and the *Andaw*, *Shitthaung*, and *Dukhanthein* pagodas, with their dark passages, images, and inscriptions, and the *Pitakat Taik*, or ancient depository of the Buddhist scriptures, are among the most interesting sights of the place.

The antiquarian will thus find that *Myohaung* is full of interest, as also, if he has time to visit it, the *Mahamuni Pagoda*, some 22½ m. farther N. *Arakan Flotilla* launches ply regularly to *Kyauktaw*, which is only 5 m. by a good road from *Mahamuni* : from there a good road, fit for bicycles, runs

to Myohlaung, with small D.Bs. at convenient points (no servants or supplies at them). From Myohlaung launches ply to Akyab at regular intervals. A trip may also be made by river steamer to Paletwa, the headquarters of the Arakan hill tracts District, which is inhabited by Chaungthas, Shandus, Kwemis, Chins, Mros, and other strange hill tribes. There is a comfortable Circuit Bungalow capable of accommodating two travellers and containing furniture, crockery, lamps, etc. Meals cannot be obtained; and there are no hotels.

Wild goat (such as goral and serow) and an occasional gaur and elephant can be shot on a plateau or hill named Kyaukpandaung 4500 ft. high, situated about 26 m. from Paletwa. Rhinoceros, the double-horned variety, and elephant are fairly numerous along the Ru and Lemro streams. The hills are steep and are covered with bamboo jungle, sparsely interspersed with trees. Fair Mahsir fishing is also obtainable on the Lemro. Wild pig, jungle fowl, pheasant and partridge abound everywhere.

ROUTE 4.

From RANGOON to BASSEIN and back.

Bassein can now be reached by railway from Rangoon (see Route 1, end), but the trip can be made with ease and comfort in one of the steamers of the Irrawaddy Flotilla Company, which leave for Bassein three times a-week, and may be of interest to those who

wish to see something of the lower reaches of the Irrawaddy, and of the mode of life of the thriving people of the delta. It may be extended to Henzada (steamer twice a-week) and other river stations, according to the time which the traveller has at his disposal. All necessary information about times of starting, places of call, etc., will be readily obtainable at the office of the Irrawaddy Flotilla Company on the Strand Road, Rangoon. There are no hotels in Bassein, but travellers can be accommodated in the Circuit House.

Henzada town has a large D.B. for travellers, in addition to a Circuit House, and a P.W.D. Bungalow. Permission to occupy them must be obtained from the Deputy Commissioner and the Executive Engineer, Embankment Division, Henzada, respectively. All are fully furnished. The District is also well equipped with bungalows, which would prove useful to hunters of big game, which abounds 15 m. to the W. of the Henzada to Kyangin Railway. As shooting grounds are almost all situated within reserved forests, permission to shoot and a licence must be obtained from the Deputy Conservator of Forests. There are no antiquities worth seeing, and the District roads are bad. There are daily steamers to Prome and trains twice daily to Rangoon, Henzada being the half-way house on the rail between Rangoon and Bassein.

Bassein, the chief town of the Bassein District, and headquarters of the Irrawaddy Division in Lower Burma, is situated on both banks of the Ngawun River, the extreme Western mouth of the Irrawaddy (population 37,081). It is a place of call for ocean-going steamers, being one of the principal ports of Burma. There is a daily railway service to Rangoon *via* Henzada.

The town is said to derive its

name from the word "Pathi," the Burmese term for Muhammadans, as there were so many of them. To this source legend ascribes the building of the Shwemoktaw Pagoda, in the centre of the town, said to be one of the most ancient and venerable in Lower Burma. A Muhammadan Princess named On-mādan-di had, according to the legend, three lovers (presumably Buddhists), and she told each of them to put up a pagoda. One put up the Shwemoktaw, the second put up the Tagaung Pagoda, at the Southern edge of Bassein town, and the third put up the Thayaunggyaung Pagoda. The word "Bassein" is a corrupted form of Kusim, the Cosmin of the Portuguese and other early European writers.

Bassein loomed large in the Second Burmese War of 1852, and for many years there was a British Fort there, which included the site occupied by the Shwemoktaw Pagoda; but all traces of fortification disappeared long ago. Besides the usual public buildings and schools, missionary and lay, the Roman Catholics have a mission here, and the American Baptist Mission has three branches—for the Burmese, for the Sgau Karens, and for the Pwo Karens. There is also an Anglican Church and a clergyman of the Additional Clergy Society. There are several rice-mills on either side of the river, and a large export trade in rice is carried on, chiefly to Europe.

The principal local industries are umbrellas and pottery. The former are light sunshades, coloured with pretty designs, and famed throughout Burma. The latter includes flower-pots and ornamental articles.

The District is especially noted for its fisheries, the largest being the beautiful Inye Lake, situated in the Kyonpyaw subdivision. It is formed in the shape of a horse-

shoe, with a large island in the centre, about $1\frac{1}{2}$ m. long and 1 m. broad. Diamond Island, which is also included in the District, is a charming little islet lying well out at sea opposite the mouth of the Ngawun River, over 70 m. from Bassein. It is in wireless communication with Calcutta and Port Blair, and is the place of call for steamers requiring pilots to come up the Bassein River. It is noted for its large turtles, which lay thousands of eggs on the shore of the island. These eggs are exported in enormous numbers to Rangoon and other parts of the Province. The Irrawaddy Flotilla Company's steamers ply to all important villages in the District.

ROUTE 5.

Up the CHINDWIN to KINDAT.

Physical Description.—The Upper Chindwin is the Northernmost district of the Sagaing Division in Upper Burma. Though its headquarters (at present at Kindat, but about to be removed to Mawlaik, 10 m. lower down the Chindwin River and on the opposite (W.) bank) lie nearly two degrees S. of Myitkyina, it is the only District in Burma whose administered territory stretches N. of latitude $25^{\circ} 45'$. Beyond that parallel it has no boundaries. The last administered village is Hmanbin, about 24 m. below the falls of the Chindwin, and under the control of the Kanti Sawbwa.

The unadministered tracts

within the boundaries of the Province and the sphere of influence (more or less) of the Deputy Commissioner may be enumerated as follows:—

(1) The Taro Valley, to the N. of the falls. This lies along the Chindwin, and is separated at its N. end from the better-known and larger Hukong Valley (really a vast plain) by a range of hills through which the river flows in narrow defiles. The valley is held by petty Kachin Chiefs with numerous Naga subjects.

(2) The tract between the upper part of the Kanti State and the administrative boundary of the Naga Hills (a District of Bengal and Assam which lies some 70 odd m. W. of Kanti itself). This is inhabited by wild Naga tribes, of which very little is known, and has never been explored—at least from the side of Burma.

(3) S. of the above the Saramati range and the country round its base, including the valley of the Nantaleik. This also is occupied by head-hunting Nagas. The Nantaleik Valley was partly explored by Mr Porter, Deputy Commissioner in 1893; and in 1911 Mr Street, Assistant Commissioner, led a column along the same route, rounding the base of Saramati, and returning to the Chindwin, where it crosses latitude 26°.

(4) The tributaries of the Chindwin to the E. and S. of Kanti, towards the Kachin country to the N. of Myitkyina District, contain a few small and scattered Kachin and Naga villages, which regard the Kanti Sawbwa more or less as their over-lord, though they pay no tribute to him.

(5) S. of the Nantaleik Valley up to 10,000 ft. is a mountainous region, sometimes called the Somra Tract, of which a part close to the border of Manipur is thickly populated by a Naga tribe named by the Manipuris "Tangkhuks,"

and by the Burmese "Uzumbok," or "Crested Chins," from their method of dressing their hair. Between them and the Chindwin the hills have of late years been occupied by Kukis (Chins) from Manipur, who have compelled the Tangkhuks to pay them tribute.

Minerals.—Coal exists in large quantities, but this has been found so far in localities where it would not at present pay to work it. A portion of the carboniferous tract between the Yu and Myittha Rivers was explored by Dr Neotling, who declared the coal to be of good quality, comparing favourably with the best Indian kinds. Dr Neotling has estimated that in this area alone, to which all the coal in the District is by no means confined, more than 100 million tons of workable coal could be obtained above the level of the Chindwin. Mineral oil occurs in several places, most plentifully within the coal-bearing tracts. Gold-dust is found in the Chindwin and other streams which flow into it from the E., but appears to be most plentiful in the Uyu River and its tributaries—in fact, some of the inland villages in the Maingkaing township have had a gold currency from time immemorial. Rubies and sapphires have also been discovered on or near the Uyu. None of the above minerals, however, have as yet been systematically worked. Jade is found in the Nantaleik River near Tamanthi, and on the Namsam, which forms the boundary between the Upper Chindwin and Myitkyina Districts in the extreme N.E. No stone, however, has been quarried in the mines on the Nantaleik since the annexation. Pottery clay is fairly common, but little use is made of it. Salt springs are found at Yebawmi on the Uyu, and boiling is carried on there to a small extent. Strong indications that petroleum is located in the area to the E. of

Kindat, some 25 m. distant from that centre, have led to the exploiting of this area by the Indo-Burma Petroleum Company, who have sunk many wells and are actively engaged in prosecuting their search for the mineral oil. Indications also of the presence of petroleum in the hill tracts on the E. of Kyabin township in the Mingin subdivision have led to the area being licensed to another Company.

Communications.—The main highway of the District is the Chindwin River, which runs through it for some 430 m., and varies in width below Homalin from a furlong to a mile or more. The maximum rise and fall at stations where a record is kept is shown below. The ordinary rise is a few feet less :—

Kindat, 50 ft. 1 in. (1905)
Homalin, 37 ft.

Kalewa, 48 ft. 3 in. (1906) { No record kept in earlier years.

Difficulties of navigation begin in January or February, and are not over till May. The river has to be buoyed afresh each year, and three Government launches are constantly employed on this duty and in the work of removing snags from Homalin downwards between the end of October and the early part of June. The channels vary incessantly, necessitating frequent removal of the buoys, and in the dry season steamers are constantly running aground. Difficulties do not necessarily increase Northwards : they may be greater N. of Kindat one year and S. of it another; but on the whole the tendency is for the channel to grow shallower up stream.

There are numerous whirlpools the best known of which are the Pe We, just below Kalewa; a whirlpool opposite Masein, where the R.I.M. steamer *Pagan* was lost in 1897; and another in the neighbourhood of Heinsun, below Kanti—"Anvil Whirlpool," so

called from the anvil-shaped rock near mid-stream at its lower end : the current supplies the hammer.

The channel up to Homalin is buoyed and cleared of snags yearly by the Assistant River Conservator, with three Government launches. The falls have been approached by launch, but navigation in the defile below them is difficult, if not dangerous, except in favourable circumstances.

Other Rivers.—Navigation on the Uyu is uncertain and difficult, but launches can go some miles beyond the border of the District, 135 m. from its mouth at the height of the rains.

Gangaw, 169 m. up the Myittha, can also be reached when the river is in flood. The Yu River is impassable for launches, and dangerous for boats during the monsoon.

Roads.—The only roads maintained by the Public Works Department for use throughout the year are from Sitthaung (a hamlet on the Chindwin) to Tamu (37½ m.); from Kalewa to Kalemmyo (27½ m.), and from Pyintha, the port of Kalemmyo on the Myittha, through Kalemmyo towards Fort White in the Chin Halls (9½ m. within the District). The Sitthaung-Tamu Road is the mail route into Manipur. It is crossed by streams, which are impassable when in flood. None of these roads can be used by carts.

The Public Works Department also maintain fair-weather roads from Homalin to Maingkaing (30½ m.), with a branch to Thetkedaung (4 m.); Kaungngo (on the above road 4 m. from Maingkaing) to Paungbyin (62½ m.); Paungbyin to Kindat (65 m.); Pyintha towards Falam (19½ m. within the District), with a branch from Natchaung to Myittha at Indin. The nominal roads from Homalin to Tamanthi (62 m.) and from

Leiksaw, on the Paungbyin-Kaungngo Road, to Naungpuaung, near the Maingkaing - Homalin Road (20 m.), are not at present maintained.

Steamer Services.—The Irrawaddy Flotilla Company runs a service of steamers as far N. as Homalin. In the rains a steamer from Pakokku leaves Monywa for Kindat on Friday, Kindat for Homalin on Tuesday, and Kindat for Monywa on Friday in each week. In the dry season it remains at Kindat during Tuesday and part of Wednesday, and then returns to Monywa, the Kindat-Homalin run being served by a small steamer, without first-class accommodation, which leaves Kindat every Wednesday and gets back there on the Monday following. All these steamers have a bazar on board. Owing to War requirements the steamer service has been dislocated and the Irrawaddy Flotilla Company run one steamer a week only. At present this steamer leaves Monywa on Friday morning, arriving at Kindat on Sunday, and leaves for Monywa on Tuesday morning in each week. What the arrangements will be in the rains it is not possible to say. At present the Company runs no steamer N. of Kindat, and communication with Homalin and other riverine stations between Kindat and Homalin is maintained by two small Gov-

ernment launches, one of which only has accommodation for European passengers.

Accommodation.—There are no D.Bs. in the District and no hotels. Kindat has a Circuit House and an Inspection Bungalow of the Public Works Department. There are Inspection Bungalows also at Homalin, at Sitthaung, Pyinbon, Kyaukzedi, and Tamu, on the Sitthaung-Tamu Road; at Kalewa, Natkyigon, and Pyintha; and at Mingin. Paungbyin and all township headquarters off the river have a Circuit Room in the court-house.

Pagodas.—The principal pagoda is the Nan-u-shwe-bôntha, near the Post Office, Kindat. It is said to have been erected by Alaungpaya (1753-60) after the conquest of Manipur.

On the other side of the river, picturesquely situated among the hills, is the Paungdaw-u Pagoda, said to be the work of his son Sinbyuyin (1763-75), who also marched against Manipur.

Scenery.—The scenery up the Chindwin River is very remarkable, and is enhanced during the open season by the picturesque costumes of the various tribesmen who visit the plains in search of work and trade. Large numbers visit the riverine villages during the open season and their various tribal costumes attract immediate attention.

CEYLON

"THE traveller who can choose his own time for visiting Ceylon and make sure of fine weather in Colombo, as well as for travelling in the interior, should choose February to May inclusive, when Nuwara Eliya also is climatically quite delightful, while often enjoyable in August, September, December, and January."—*Fergusson*.

The scenery of Ceylon is magnificent, and its climate attracts an increasing number of visitors. It is very easy to reach Ceylon by steamer from an European port to Colombo. "Visitors, not only from the East generally, but also from England, spend months in Nuwara Eliya, where amongst many other attractions there is an 18-hole golf-course, which is said to be the best in the East."

The area of the Island is 25,332 sq. m.; and the total population (including coolies, but excluding the military and shipping), as enumerated at the last census of 10th March 1911, was 4,106,350, and consisted of 7625 Europeans, 26,857 Burghers, 2,714,616 Sinhalese, 1,059,354 Tamils (including coolies), 266,454 Moors, 13,089 Malays, and 17,540 others.

The exports from Ceylon during the calendar year 1916 were:—Tea, 199,000,000 lb. (green), 4,000,000 lb.; coffee (plantation), 30 cwts.; cardamoms, 3900 cwts.; cinnamon (quills), 19,859 cwts.; chips, 24,899 cwts.; plumbago, 668,216 cwts.; cocoa, 73,245 cwts.; cocoa-nut oil, 323,017 cwts. The total quantity of Ceylon rubber exported during the same period was 54,509,267 lbs., valued at Rs.103,511,925, as compared with 48,803,816 lbs. in the corresponding period, 1915.

The value (omitting specie and the value of coal for the use of steamers) of the exports during 1916 was Rs.297,505,905; that of the imports Rs.211,500,753. The public debt amounts to £7,001,000: it has been incurred for the construction of harbour works, railways, irrigation projects, water-works, drainage and other public works. The old kings constructed irrigation works by which a great part of Ceylon was made cultivable. The revenue is in round figures sixty-six millions of rupees. The shipping of Colombo amounts to 6,200,000 tons, and the Harbour dues to Rs.1,680,000.

The Currency of the Island is on a decimal basis, and the rupee is divided, not into annas as in India, but into cents. The currency consists of copper (1 cent and $\frac{1}{2}$ cent pieces), nickel (5 cent piece), silver (rupee, 50 cent, 25 cent, and 10 cent pieces), Ceylon Government currency notes of Rs.1000, Rs.100, Rs.50, Rs.10, and Rs.5. The sovereign is now legal tender, $\frac{1}{2}$ 1=Rs.15. The rupee is therefore equal to 1s. 4d., from which rate it varies only fractionally,

according to the exchange operations of the Banks.

History.—In the accounts of the ruins and some of the buildings in Ceylon, names of the early kings and historical events so often occur that a list¹ of the former and some mention of the latter may be useful.

The Mahawansa (=Mahavamsa) is the chief national Chronicle.

¹ See Appendix A, after Route 10, on page 693.

written in Pali in the 5th century A.D. by Mahanama, a priest of the royal line. This has been translated and utilised by Turnour (of the Ceylon Civil Service, 1837), Wickremasinghe and Wijesinha (= Vijisinha). The Dipavamsa, an older Chronicle, is the history of the Island. The Suluwansa is the Chronicle of a race of inferior power. The dates may be accepted as provisional, liable to correction as more inscriptions are deciphered.

Wijaya (543 or 483 B.C.), is said to have come over from India on a raiding expedition and established himself in Ceylon. Though the Mahawansa describes a visit of Gautama Buddha to Ceylon, there is no historical evidence for it. During the reign of Dewanampiya Tissa (307-267 B.C.), Mahinda, son of Asoka, King (272-231 B.C.) of Magadha in India, was sent over to introduce Buddhism into Ceylon. The Tamils (= damilos in the Mahawansa), i.e., the Cholyans and Pandiyans of S. India, constantly raided the island. Elala was a Cholyan king (205-161 B.C.); his tomb is at Anuradhapura. Another Tamil invasion was in 104 B.C.; another in the middle of the 9th century. Sena II. crossed to India to help a prince of Pandya. The Indians looted Anuradhapura and carried Mahinda V. (1001 A.D.) captive. Wijaya Bahu I. (1065 A.D.) recovered Polonnaruwa from the Tamils. This was the seat of Parakrama Bahu I., the great king (1164 or 1153 A.D.) for 33 years. The Portuguese and other Europeans appeared on the scene from the 16th century, and from 1592 the native kings ruled from Kandy. "Ceylon has been continuously, but not entirely, ruled by European races since 1507, when the Portuguese settled on the W. and S. coasts. The Dutch dispossessed the Portuguese in 1656, but gave way in turn to the British, who have held the Maritime Provinces since 1796,

and the whole Island, including the interior and Kandyan Kingdom, which neither the Portuguese nor the Dutch ever occupied, since 1815."—*White*.

Capitals.—The capital of Ceylon has changed from time to time, and various dates have been assigned to the moves. Earlier than Anuradhapura, the capital was Magama (Tissamaharama), in the extreme S.E. of the island. Anuradhapura, founded about 500 or 437 B.C., became the settled capital from about 267 B.C. to 729 A.D.; according to other statements, from 500 B.C. to the middle of the 9th century. Within the above period Sigiriya was the capital for 18 years from 477 A.D., during the reign of Kasyapa I. Polonnaruwa, as a capital, has been dated from 781 to 1288 A.D.; also, variously to 1013 A.D., and, with breaks, up to 1314 A.D. Yapahuwa was the capital, for less than 20 years in the 13th century, c. 1277. The capital was at Kandy, from 1592 to 1798.

Buddhism in Ceylon.—The census has shown the Buddhists to be more numerous in Ceylon than the followers of all other religions. The whole subject of Buddhism in Ceylon (belonging to what is called the Southern School) has been exhaustively treated in Bishop Copleston's work *Buddhism, Primitive and Present, in Magadha and Ceylon*, second edition 1908, from which a few facts have, with permission, been taken.

When Mahinda, said to be a son of Asoka, King of Magadha, c. 272-231 B.C., the most powerful patron of Buddhism, introduced that religion into Ceylon about 250 B.C., he met the reigning king Tissa at the place now known as Mihintale (Mahindatale). He brought with him (in memory, for none of the books were yet written) the collection of Buddhist "Canonical Books," known by the name of the

Three Pitakas, and the Commentaries upon them all in Pali. He translated them into Sinhalese (a language which was closely allied to Pali), and they are believed to have been preserved in Ceylon by oral tradition, till they were committed to writing about 80 B.C. (at Aluwihara, a spot on the road between Kandy and Anurādhapura, which is well worth a visit. It is extremely picturesque). From Mahinda's time onwards, Buddhism may be said to have been the national religion, and was officially patronised; shrines were built, viharas constructed as dwellings for the monks, and many inscriptions are still to be seen in which such donations are recorded. A very fine specimen of such an inscription, on the living rock, in "Asoka" characters, is to be seen close to the high road from Kurunegala to Puttalam, about 18 m. from the latter. It is in one line, over 100 ft. long. The frequent invasions, however, of Tamils from Southern India, and the usurpation of the throne by Tamil dynasties, repeatedly led to the expulsion of the monks and the destruction of their buildings. About 400 A.D. Buddhaghosha, the chief commentator, is said to have come from Magadha to inquire into these Commentaries. He translated into Pali what he found and composed more. His works have left their impress on the Ceylon school of Buddhism, and have been considered as absolute authorities on the interpretation of the sacred text. During the succeeding centuries the religion underwent many vicissitudes; but the victories of King Parākrama Bahu I., 1164-1197 or 1153-1186, "established him in undisputed power, which he used for the reformation and promotion of Buddhism and for the erection of innumerable buildings for its service." This period of prosperity was followed again by troublous times, and Buddhism had little vitality when

the British occupied Ceylon in 1796: it became "more and more the religion of the less civilised and less prosperous." In the period 1875-1900 there was a remarkable revival, due mainly to external influence, and this movement has still considerable force.

Names of Places.—The names of places in Ceylon have a formidable appearance, and a bewildering sound, for visitors; but a slight acquaintance with the language removes much of their terrors. Many of them end in *-pura*, or in the Tamil districts *-puram*, which means "town" (Sanskrit, *pura*), or in *-nuwara*, "city" (Sanskrit, *nagara*); many in *-gama* (Sanskrit, *grāma*) "village"; others in *-gala* (Sanskrit, *giri*), "rock" or "hill"; *handa* is a "mountain." Others, again, are formed with *-tara*, Sanskrit, *tāra*) "crossing," or "ford"; *tota* (Sanskrit, *tīrtha*), "landing-place" or "port." To these *-turei* corresponds in Tamil Districts. Others are named after the artificial lakes, or "tanks," which are such an interesting feature of Ceylon scenery, and which are called in Sinhalese *tale* (Pali, *talāka*), or *wewa* (Sanskrit, *vāpi*), and in Tamil *kulam*; while smaller ponds give the termination *-vila*, (Tamil, *-vilei*). Other common endings are *-deniya*, "field," *-pitiya*,* "ground," *-waita*, "garden." The earlier part of the name is very frequently the name of a tree; just as in England we have Ashdown and Beech Hill. The word *ārāma*, a "pleasure-garden" or "park," explains Tissarama, "King Tissa's Park," and Thuparama, the park of the oldest "stupa" or "dagoba" in the Island. The visitor may thus recognise in Nuwara Eliya the "plain" in the territory of "the city" (Kandy); in Anurādhapura the "city" of the nobleman Anuradha; Kurunegala is the elephant "rock"; Hambantota, the "port" of the Malay boats,

called "hambans" or "sampans." Even Kahatagasdigiliwewa becomes intelligible as the "lake" of the kahata-tree branch, and Urugasmanhandiya as the "junction of roads by the uru-tree."

Administration.—"Ceylon belongs to the class of what are known as Crown Colonies. . . . It is administered direct from the Crown by the Secretary of State for the Colonies, with whom, at the Colonial Office in Downing Street, the Governor communicates on all matters of State. Locally the executive and administrative power is in the hands of the Governor, who is assisted by an Executive Council of seven official members.

"The Executive Council consists of the Officer commanding the troops, the Colonial Secretary, the Attorney-General, the Controller of Revenue, the Treasurer, and two additional officers nominated by the Governor.

"The Legislative Council consists of the Governor, the above seven Executive Councillors, four other office-holders, and six nominated and four elected unofficial members. Of the elected members, two represent the Europeans—one elected by the urban residents, and one by residents in the country Districts and small towns. One member is for the Burgher class, and one for the educated Ceylonese other than Burghers or Europeans. Of the nominated unofficial members two represent the low-country Sinhalese, two the Tamils, one the Kandyans, and one the Muhamadan community.

"For purposes of general administration the Island is divided into nine Provinces, presided over by Government Agents."—*White*.

The Governor is appointed for a term of six years, at a salary of Rs.105,000 (including Rs.22,500 entertainment allowance) per annum, with residences in Col-

ombo, Kandy, and Nuwara Eliya. The late Governor, Sir John Anderso, G.C.M.G., K.C.B., appointed in April 1916, died in March 1918. Sir William Manning has succeeded him.

Travelling¹ in Ceylon is, for the most part, comparatively easy. The Railway has always been a Government system, and is one of the principal sources of revenue in the Island. The first section was opened in 1865; there are now 706 m. open, including the branches. The lines are constructed on a broad gauge (5 ft. 6 in.) with exception of the Kelani Valley Railway and the Nuwara Eliya section (2 ft. 6 in. gauge). On the main lines the chief trains are provided with refreshment cars and good sleeping accommodation (Rs.5, above 1st class fare). The Roads are in most places excellent, and the Rest-houses are far more comfortable places of abode than the corresponding institutions in India. In the larger towns, such as Badulla, Ratnapura, Matara, and at some of the stations on the great north road, they are, in all but name, hotels; but the traveller is not allowed to remain in them more than three days without permission, which, however, is easily procured. On all the principal roads they are usually provided with bed- and table-linen, baths, tea and dinner services, etc. This is not, however, the case at those on the less-frequented roads, where the Rest-houses often furnish only shelter. The Coaches are not very comfortable or well horsed, but are still in some places the only vehicles available. Seats should be engaged as long beforehand as possible. Carriages for long journeys can be hired in the larger towns. The rate for two horses is generally R.1 per mile, the *h*irer paying all tolls. On

¹ *The Pocket Time and Fare Tables* (10 c.), published by the Ceylon Government Railway, is a most useful compilation.

the more important routes, however, motor-bus services are replacing the old horse-coaches. In remote places the Bullock cart or the Hackery (a light cart with a trotting bull) is the only conveyance possible. Bicycles (with strong brakes) are most useful. The Motor-car, however, is now commonly used everywhere in the Island, and affords the most perfect means of touring the Island. Cost may be calculated roughly at R.1, 25 c. per mile. Cars may be hired at Colombo or Kandy. Motorists are warned to be careful of the sharp elbows and S turns on the roads. The gradients in some places are severe. Messrs H. W. Cave & Co. publish a Motor Map of the Island, price Rs.2, (50 c.) A coasting steamer makes a circuit of the island twice weekly, once North and once South.

A list of books on Ceylon will be found, under the heading "Ceylon," under "Books" in the Introduction, at page xxxii.¹ Good maps may be procured at the Surveyor-General's office.

Travellers generally enter Ceylon by the **PORT OF COLOMBO** *. Population 211,274 in 1911. Lat. 6° 55' N., long. 79° 50' E. The flashing light is visible 18 m. at sea. It is situated on shore, near the S. end of the harbour, on the top of the Clock Tower.

The Landing Jetty and Custom House lie at the S. end of the harbour, and receive the protection of four magnificent breakwaters, of which the S.W. Breakwater was first constructed. This structure, the first stone of which was laid by King Edward VII., then Prince of Wales, on the 8th December 1875, was completed in 1885, at a cost of £793,207. It is 4212 ft. long, and is formed of concrete blocks of from 18 tons to 33 tons each, and capped by a solid concrete mass, the top of

which stands 12 ft. above low-water level. It terminates in a circular head, 62 ft. in diameter, on which stands the Pilot Station and a small lighthouse showing a red light.

The N.E. Breakwater, which is a rubble embankment 1100 ft. long, tipped from a staging, was commenced in 1896 and completed in 1902 at a cost of £93,665.

The N.W. Breakwater is an island work 2657 ft. in length, and running between the S.W. and N.E. Breakwaters, leaving a S. entrance of 800 ft. and a N. entrance of 700 ft.

This breakwater is of similar construction to the S.W. Breakwater, and carries two small light-houses, one at each head, N. and S. It was commenced in 1898 and completed in 1907 at a cost of £437,992.

An arm running at an angle to the S.W. Breakwater was commenced in 1907 and completed in 1912 at a cost of £304,935.

This breakwater is also similar in construction to the S.W. Breakwater, and is 1800 ft. long, terminated by a circular head, on which stands a small lighthouse.

The area protected by these breakwaters is 640 acres, or 1 sq. m., three-fourths of which have water more than 27 ft. deep, and afford shelter, during the S.W. monsoon, for forty-seven ocean-going steamers, drawing from 27 ft. to 33 ft. of water, and forty-one during the N.E. monsoon, drawing from 27 ft. to 33 ft. of water.

A Graving-dock, capable of taking vessels up to 700 ft. long, 75 ft. broad and 30 ft. draught, and a Patent Slip for smaller vessels have been constructed.

A Coaling Depot, 18 acres in extent, with eighteen jetties, each 200 ft. long, and a barge-repairing basin, have also been constructed.

The shore accommodation for ships' cargo has been much improved and added to by the construction of four large warehouses,

¹ Fergusson's *Ceylon Handbook and Directory* contains all the usual detailed information in such works.

built on a reclamation on the S.E. margin of the harbour, with a quay frontage of 3795 ft.

A canal connecting the harbour with lake is also under construction and nearing completion.

The charge for conveying each person between the Passenger Jetty and any vessel within the inner harbour is 35 cents, or 6d., and 55 cents, or 9d., from 6 A.M. to 7 P.M., and 7 P.M. to 6 A.M. respectively; and 55 cents, or 9d., and 75 cents, or 1s., from 6 A.M. to 7 P.M., and 7 P.M. to 6 A.M. respectively, between the Passenger Jetty and the outer harbour.

The Grand Oriental Hotel stands near to and overlooking the Passenger Jetty, and close by the Bristol Hotel, "Queen's House," the Barracks, and some remains of the old Dutch Fort.

The traveller who intends to stop a day or two may prefer to drive on, a little more than a mile, to the Galle Face Hotel. He will pass by the Government Offices, looking out on the Gordon Gardens and, proceeding between Queen's House (the Governor's residence) on his right, and the new General Post Office on the left, he will, after passing the Clock Tower (good view of the city from the top, see p. 657) and the Barracks, consisting of several blocks, built *en echelon*, at a great cost to the Colony, find himself on the fine open space called the Galle Face, intersected by the direct road to Galle.

Nearly in the centre of the Galle Face Esplanade is a small fort, and a little farther to the south is the Colombo Club, a fine oval building overlooking the sea. About the middle of the Promenade, near the sea, is a stone like a milestone, with an inscription in which Sir Henry Ward, who made it, recommends the walk to the care of his successors for the use of ladies and children.

The City of Colombo extends

from the Kelani River on the N. to the fourth mile on the Galle Road on the S., and has a breadth of $3\frac{1}{2}$ m. from the sea to the E. outskirts.

Drives.—Colombo and its neighbourhood afford scope for a multitude of charming and picturesque drives. Two especially may be mentioned, one of which might be taken in the morning and the other in the evening of the same day. The first is recommended to those who have not yet seen anything of the East, and to whom the native town of Colombo will afford a pleasing introduction to the distinguishing characteristics of Oriental life and scenery; but, excepting the latter part of it, which is pretty, there is little in this drive to interest one already familiar with India.

(1) Commence at the Galle Face Hotel, and take the road along the sea past the Barracks, until the statue of Sir E. Barnes is reached. He was Governor between 1824 and 1831. Then turn to the right into the Pettah, or Native Town, past an old Dutch belfry, beyond which are the *Town Hall* and *Public Market-place*. Here two streets diverge—the one to the left, Sea Street, where dwell the dealers in rice and cotton, and where are two *Hindu Temples*, quaint and picturesque, but of no great size or importance; the other, Wolfendahl Street, to the right, conducts to Wolfendahl Church, a massive cruciform building on high ground, built by the Dutch in 1749, on the site of an old Portuguese church called *Aqua de Lupo*, and commanding a fine view of the city and harbour. Here are monuments and hatchments recording the decease of Dutch officials. It is the most interesting as well as the most complete of the few remaining relics of the Dutch occupation. Thence the drive may be continued in a N.E. direction to the R.C.

Cathedral of Santa Lucia, adjoining which is a college for Roman Catholic boys and a convent with school and orphanage attached. Then N. and a little W. the Anglican *Cathedral of St Thomas* is reached. It stands in a park, given by Dr Chapman, the first Bishop. About 1 m. to the N. is *St James's Roman Catholic Church*. The drive through the suburb of **Mutwal** is extremely picturesque. It is chiefly inhabited by fishermen, who are mostly Roman Catholics, as the numerous large and imposing R.C. churches testify. In Mutwal are the new **Graving-dock**, and a reservoir in connection with the town water supply. On reaching the **Kelani River** at the end of the long street of Mutwal, turn to the right, and, crossing a tongue of land till the river is again reached, follow its bank to the **Victoria Bridge**, which carries the great road to Kandy, and supersedes a most picturesque **Bridge of Boats**, long one of the most attractive spots in Colombo to an artist. This part of the drive shows to perfection the way in which the tiny houses and small churches are so nestled under the shelter of the trees as to be altogether invisible from above. Turning to the right at the bridge, follow the dusty and ever-crowded "St Joseph" or "Grand Pass" Road till Skinner's Road is reached. Turn left along it under a fine avenue of Madras thorn, till the **Railway Station** at Maradana is reached, and thence follow the side of the fresh-water lake, across which good views may be obtained, till Galle Face is once more reached.

(2) The second drive commences by crossing the bridge from Galle Face, almost immediately behind the hotel, to Slave Island, and then driving along the edge of a beautiful fresh-water lake past the pretty residence of the General commanding the troops in Ceylon to the **Victoria Park**.

The traveller should not omit to notice a picturesque little Buddhist temple on the other side of the lake nearly opposite the General's house. The Park occupies the site of the old **Cinnamon Gardens**, and is well laid out with ornamental grounds, in the midst of which a **Museum** was built in 1877. It is exclusively devoted to the exhibition of Ceylon products, antiquities, and natural history, and is on that account of the very greatest interest to the visitor. The famous tortoise, said to have been over two hundred years old at his death, is preserved here. On the basement are some interesting stone fragments, and particularly a colossal lion, brought from Polonnaruwa, on which the King sat to administer justice, one of the unique windows from the ruins of Yapahuwa (p. 678), the cast of a colossal portrait statue of King Parakrama Bahu, A.D. 1153, and some fine bronze statues from Anuradhapura. The copies of the frescoes at Sigiriya (p. 680) on the walls of the staircase should be noticed. The entrance-hall is handsome, and to the right of it is a library, to which the public have access from 6.30 to 10 A.M., and from 3 to 5 P.M. In front of the Museum is a statue of the Rt. Hon. Sir W. Gregory, Governor from 1872 to 1877.

(3) A tram-car (1st-class seats in front) may be taken at the Bristol Hotel to Borella and back. The interest of this drive is the bright picture it gives of the life of the people, the town, and its characteristic features.

(4) If time and opportunity permit, the traveller should mount to the summit of the **Great Reservoir** at Maligakande, part of the fine engineering work which furnishes Colombo with an abundant supply of good water carried in pipes from Labugama, about 25 m. distant (see p. 669). A city of over 200,000 people lies at the spectator's feet, but, except for a

few towers and domes, it is invisible, the whole being concealed by the mass of vegetation which overshadows it. Another good view of Colombo is to be had from the Clock Tower. The attendant expects a small fee (see p. 655).

Excursions.—One of the pleasantest in the neighbourhood of Colombo is that to a Buddhist temple at the village of Kelani, 2 m. up the river of the same name. Pass through the hot and dusty Pettah, or Native Town, for about 4 m., as far as the river, which is crossed by the massive iron Victoria Bridge (see p. 656). After crossing the bridge the road passes through coconut groves and among the houses of the dense population for another 2 m., when the temple itself is reached. The *Mahawanso* refers to it as contemporary with Buddha. The original dagoba was built at a very early period, but the one that is now standing was constructed between the years 1240-67 A.D., and rebuilt about 1301 A.D. It stands on the river-bank, and is handsomely, though gaudily, decorated. According to the *Colombo Guide*, it stands on the site of a shrine erected by Prince Yatalatissa, 306 B.C. A great festival takes place here at the full moon of May, and lasts four days.

None of the exclusiveness which distinguishes Hindu and Muhammadan shrines is to be found in the Buddhist temples, to every part of which a stranger is freely welcomed by the yellow-robed monks. This, however, does not apply to the dewalas, which are, strictly speaking, Hindu shrines.

The Kelani Valley Railway, opened in 1902, was the first line constructed on a narrow gauge in Ceylon.

A favourite excursion by train is to Mount Lavinia, 7 m. from Colombo (see p. 672).

Trips to Kaduwella (see p. 668) and to Kotta, where there is a College of the Church Missionary Society, prettily situated, may also be taken.

Also 23 m. N. to Negombo and 50 m. to Chilaw, going by railway, by the line which branches off from Ragama (see Route 6).

Excursions round the island may be made by the boats of the Ceylon S.S. Co., which sail alternate Wednesdays S. and alternate Fridays N., and make the circuit in about eight days.

ROUTE I.

COLOMBO TO KANDY

(By rail 75 m.) Opened 1867.

The line on leaving Colombo passes first through portions of the Cinnamon Gardens, and then crosses the River Kelani by a very fine girder bridge. To those who have never before visited the tropics this journey will be full of interest. They will see for the first time vast stretches of paddy land of the most vivid green, the unfamiliar but soon recognised forms of the cashew, the bread-fruit, the jack, the frangipani, and the various forms of palm—coconut, areca, kitool, and above all the talipot, a specimen of the gigantic white flower of which is generally visible at some point on the journey.

From $\frac{1}{2}$ m. Maradana Junction a branch line runs to Avisawella and Yatiyantota (p. 669).

At 9 m. Ragama station. Here the Boer mercenaries taken prisoners during the war were interned. The buildings are now

used as a camp for the coolie immigrants. There is a branch line from here to Negombo (see p. 676).

At 10½ m. Mahara there is a convict establishment. The convicts quarry the stone for the breakwater. The stone is conveyed in vast quantities by rail direct from the quarry to the harbour.

Heneratgoda Station. ¾ m. from the station is a Government Botanic and Experiment Garden, opened in 1876 for the cultivation of the first Para rubber plants introduced into Ceylon. The original trees, as well as the second and third generation, may be seen here. One of the original trees known as Heneratgoda N. 2, is of great dimensions for its age, and has become famous for its prolific yield of rubber, yielding 375 lbs. dry rubber during the years 1909-1912, while in no way affecting its vitality. Here may be seen Gambier (*Uncaria gambier*), also a caoutchouc-yielding shrub of Malaya, which thrives and produces seed here, though not at Peradeniya; also species of rubber producing lianas (*Landolphia*); the valuable drug ipecacuanha, which thrives in the moist tropical heat here to an extent not known at higher elevations. A female specimen of the "Double Coconut" (Coco-de-mer), planted in 1884, flowered and set fruit here in 1915 for the first time in Ceylon, being fertilised from pollen sent from a male tree at Peradeniya. The fruit is still unripe (1917). A portion of the original jungle of the low country of Ceylon, which has been preserved in the Garden, is a source of interest, especially to botanists.

34 m. Ambepussa station (R.H.). The line here enters the lower hills, and is considered to pass through some of the most unhealthy

country in the island. The mortality was terrible when the original cart-road was made from Colombo to Kandy; but in constructing the railway this was to some degree avoided by taking the labourers back to Colombo every night.

45 m. Polgahawela Junction station (R.H. new and commodious), 241 ft. above sea-level. 2 m. from here are a large Buddhist monastery and temple, recently erected at Denagomuwa. This is the junction for the direct line to Kurunegala, Anuradhapura, Jaffna, and Kankasanturai (257 m. from Colombo) in the extreme N. of the island (Route 8).

The work of linking Ceylon with India by a railway to Manaar, a ferry service thence to the island of Rameswaram, and a railway again from Rameswaram to the Indian mainland, is in progress, and will be completed in a year or two (p. 594).

Coach to Kegalla, 8 m.

8 m. S. of Polgahawela is Kegalla (R.H. *), a small town in a most lovely situation, and encompassed by the most delightful scenery. It is the headquarters of the Assistant Government Agent of the Sabaragamuwa Province.

52 m. Rambukkana station (R.H.). Here the ascent of the "Incline" commences at an elevation of 313 ft., and continues 12 m. with a gradient of 1 in 45 to an elevation of 1698 ft. The vegetation is here of great richness and beauty.

65 m. Kadugannawa station is at the top of the pass. On the way up three telegraph stations are passed, and the beautiful scenery and increasing coolness of the air make the journey most enjoyable. Two new tunnels (one of them a very long one) have been constructed to secure immunity

from rock falls, which, during the monsoons, have hitherto interrupted through-communication for prolonged periods. Near the top of the incline the road made by Sir Edward Barnes is seen on the right, winding up the hill. The two roads reach the summit of the pass at the same spot, and there a column (a model of the Duke of York's Column in London) has been erected to the memory of Captain Dawson, the engineer of the first road. Just over the station is the Hill of Belungala (the Watcher's Rock), 2543 ft. above sea-level, from which, in the troubled days of old, a watch was kept to report an enemy advancing from the plains.

71 m. Peradeniya Junction station. This place is 136 ft. lower than the top of the pass. The main line continues S., whilst the branch line to Kandy and Matale strikes N. Half a mile from the junction is New Peradeniya station, where, if the visitor is pressed for time, he should arrange to have a carriage waiting for him, drive round the Botanic Gardens, and on to Kandy.

New Peradeniya Station. The Royal Botanic Gardens, Peradeniya, are some of the finest in the East. It is $\frac{1}{2}$ m. from New Peradeniya Station and $3\frac{1}{2}$ m. from Kandy. Approaching the Gardens, on the right is a row of the beautiful tree (*Amherstia nobilis*) the most beautiful of flowering trees. Opposite, on the left approach, there was for upwards of seventy years a striking landmark in a row of Rambong rubber trees (*Ficus elastica*), which, dying from old age, were replaced by a row of young plants of the same species in 1914. The entrance gate pillars are draped by the beautiful yellow-flowered creeper *Bignonia unguis*, and on either side is a specimen of the stately African oil palm. On

entering, the visitor is confronted with a large oval group of palms, containing numerous and interesting species. To the right is the Spice Collection, including very fine nutmeg trees over seventy years old, also cloves, cinnamon, allspice, vanilla, cardamom, ginger, etc. Along the centre of the Gardens is the straight Main Central Drive, bordered on either side by a sloping bank of mixed tropical foliage and flowering shrubs, etc., and shaded by tall trees in the background. Branching off to the left at right angles is the Monument drive, leading to Gardener Monument, and passing through a young avenue of the interesting "Double Coconut" palm (*Coco-de-mer*). Opposite to this, on the right, is the short but shady Liana drive, along which are to be seen fine specimens of tropical climbers, including the climbing rattan palm (*Calamus*) and the curious chain-like stems of *Bauhinia anguina*. Reaching a gravelled circle here with a water tank in the centre containing interesting water plants, the visitor should stop to visit the Floriculture section, Orchid House, Octagon Conservatory, Fernery, the pergola of the curious flowered *Aristolochia* (Fly-catchers), and other flowering climbers.

Returning to the carriage drive and continuing, a collection of tropical fruit trees is passed on the left, also close to the drive a row of young Talipots—the Majestic palm, of which an avenue may be seen in the Southern portion of the Gardens. On turning the loop of the drive, note on the left some very large specimens of the *Guango*, or Rain-tree, of tropical South America. These were introduced about 1850, and are the parents of most of the trees so largely planted for shade along the road-side throughout the Island. Next to these, close to the drive, is a row of the Cannon-ball tree, also of S. America, bearing along the stem a profusion of curiously shaped

flowers in March and April, followed by large brown remarkable fruits resembling cannonballs. Behind are the Nurseries, also a row of the striking buttressed tree known as Java Almond (*Canarium Commune*). Further on, on the left, is a straight avenue of Palmyrah palm, which is indigenous to the dry region of Northern Ceylon and Southern India. The Palmyrah palm takes first place after the Coconut for usefulness to the peasants in the dry regions of Northern Ceylon.

The drive now passes through an avenue of Royal Palms (*Oreodoxa regia*). Further on, on the left, is a mixed avenue of the fine flowering tree *Brownea grandiceps* and the equally beautiful *Cassia multijuga*. Continuing, the drive skirts the Arboretum and follows the riverbank. Striking glimpses may be obtained across the river of Gangarooka hill and valley, where the Government Experiment Station is situated. The Great Circle is a fine stretch of circular lawn with a round group of palms in the centre. It was here that the first Rubber Exhibition ever held took place, viz., in 1906. Extending to the North is a straight avenue of the cabbage palm (*Oreodoxa oleracea*). Round the circle are many fine trees, including several planted by Royalties, including one each by King Edward and King George. The Main Central Drive being again reached, it should be followed for a short distance where two roads diverge off on the right. These lead to the Head Offices of the Department of Agriculture and its library, herbarium, museum and laboratories.

The museum is open to the public and contains an interesting collection of botanical exhibits as well as of agricultural products, insects, etc. Returning to the Main Central Drive, the Great Lawn, remarkable for its wide extent and undulating contour, is passed on the right, the Fernery

and Floriculture section on the left. Turning to the right, the Monument Road, already referred to, may be taken. Following the lawn and turning to the right again, a row of the fine foliaged and flowering tree (*Jacaranda mimosaefolia*) is passed on the hillside on to the left. Reaching the river drive by the short loop to the left, a good view of the river and the bamboos fringing its banks is obtained. The small lake now reached contains interesting water plants, including the Egyptian Papyrus and the Giant Water-lily (*Victoria regia*). The carriage drive now enters the new Palmetum, planted in 1916. Here also is a short but very striking avenue of the Talipot palm, the giant of the palm tribe. Behind is the Students' Garden, and further on a collection of bamboos and screwpines (*Pandani*). Here a glimpse may be obtained of the three-spanned iron and concrete bridge which displaced in 1906 the famous one-spanned Satinwood Bridge. (A model of the latter is in the South Kensington Museum.) Returning by the drive to the Main Entrance this very brief tour of the Gardens is completed.

To summarise, it may be stated that to an ordinary visitor the chief features of the Gardens are the enormous clumps of Giant bamboo, extensive and well-kept lawns surrounded by magnificent specimens of trees, avenues of palms (Talipot, Palmyrah, Royal palm and Cabbage palm) and the specimens of *Ficus elastica* with its enormous buttressed roots meandering over the surface.

Crossing the river by the ferry to the Experiment Station at Gangarooka, one may see areas of tea, coffee, cacao, rubber, coconuts, rice and vanilla under experimental culture, and smaller plots of various plants of economic importance in the tropics.

The various tapping and manual experiments with Para rubber

are of considerable importance to the rubber industry of the Colony, while in the tea plots the advantages of growing small leguminous shrubs between the tea has been clearly demonstrated. The old cacao is under manurial experiment, while areas of younger plants are rapidly coming into bearing. Areas of coconuts are being treated with different methods of cultivation and various varieties of rice are being tried experimentally.

On this Experiment Station are the remains of an old Portuguese Fort, which are being maintained in good condition.

Near the gates of the Gardens and 10 mins. walk from New Peradeniya Station, is a comfortable Rest-house.

A tea-estate and factory opposite the railway station may be visited by arrangement.

75 m. KANDY station * (Junction for Matale, p. 679). The capital of the former kingdom of Kandy, 1602 ft. above sea-level; population 30,000.

History.—The first authentic mention of Kandy as a city is in the Sagama inscription of the 14th century. In 1542, according to the Mahavamsa Chronicle, it became the seat of Vira Vikrama, king of the up-country, but it was not until the close of the 16th century that it was adopted as the capital of the island by Vimala Dharma Suriya I. after the destruction of Kotte and the defeat of Raja Sinha I. of Sitawaka in 1593. During the wars with the Portuguese and Dutch, Kandy was so often burned that scarcely any of the ancient buildings, except the temples and the royal residence, were remaining when the English took it in 1815. The *Palace*, a wing of which is still occupied by the Government Agent of the Province, consisted of a number of buildings scattered

over the area behind the Temple of the Tooth and along Malabar Street, so called from the dwellings of the "Malabar" or Tamil relatives of the later kings. The improvement of the city was undertaken subsequent to 1803 by the last king, Sri Vikrama Raja Sinha, by whom the Octagon, the main Portico of the Palace (now leading to the Maligawa Temple), and the lake, were either completed or commenced. The Temple, in which the sacred tooth is deposited, well deserves a visit.

Description.—The scenery up to Kandy is magnificent. Kandy is picturesquely situated on the banks of a small artificial lake, overhung on all sides by hills. A road called Lady Horton's Walk winds round one of those hills, and on the E. side, which is almost precipitous, looks down on the valley of Dumbura, through which the Mahaweli-ganga rolls over a channel of rocks, "presenting a scene that in majestic beauty can scarcely be surpassed." In a park at the foot of this acclivity is the Pavilion of the Governor. Serpents are numerous here, especially the cobra and carawilla. The large black scorpion, as big as a crayfish, is also found here.

The Maligawa Temple or "Temple of the Tooth," though not grand or imposing, is one of the most picturesque buildings in Ceylon. It stands with its back against a wooded hill; at its feet lies the long moat or tank, alive with tortoises, and crossed by a small bridge, flanked by two carved stone elephants. Above, an enclosing battlemented wall looks over a flat expanse of the greenest grass dotted over with trees.

In the centre of the courtyard, and occupying the greater part of it, is the sacred building. On a lotus flower of pure gold, hidden under seven concentric bell-shaped

metal shrines, increasing in richness as they diminish in size, and containing jewels of much beauty, now reposes the sacred relic.

The "sacred tooth" was brought to Ceylon in the reign of Sri Meghavanna, 304-332 A.D. (according to Geiger, 352-379 A.D.), in charge of a Princess of Kalinga, who concealed it in the folds of her hair. It was taken by the Tandyans about 1283 A.D., and again carried to India, but was recovered by Parakrama Bahu III. Later on the relic was at Kotte, but in 1560 was discovered by the Portuguese at Jafna, taken to Goa by Don Constantine de Braganza, and burned by the Archbishop in the presence of the Viceroy and his court. The Buddhists deny the authenticity of the relic so destroyed, and assert that the real tooth was hidden and is the one now at Kandy. This is a piece of discoloured ivory, 2 in. long and less than 1 in. in diameter, resembling the tooth of a crocodile rather than that of a man. There is some evidence to show that Kandy, as well as Kotte, boasted of a tooth relic in the early 16th century. There are many other jewels and ornaments of interest in the shrine, the brazen doors of which merit observation. The eaves of the projecting roof, the massive supporting pillars, corbels, and ceilings are profusely decorated in bright colours with painted figures, grotesque monsters, and floral patterns. The octagon tower contains a fine Oriental library.

The Kachcheri, the District Court, and the Supreme Court form three sides of a triangle. The Supreme Court is the audience hall of the kings; the carving of the wooden pillars is notable. If the Court is sitting, the English visitor will be struck by the system of interpreting evidence.

Near the Kachcheri is the Museum of the Kandyan Art

School, where articles in silver and brass are for sale.

No one should leave Kandy without seeing the Peradeniya Gardens (see p. 659).

An interesting excursion may be made to three Buddhist temples situated near each other at a little distance from Kandy — Gadadeniya, Gallengolla, and Lankatilaka. Each is curious in a different way. One is a modern temple, very well kept up, and situated most romantically among huge boulders of rock; the second is very ancient, but in the last stage of neglect, decay, and dilapidation; the third, Lankatilaka, is remarkable alike for its situation on the top of a rock and for the character of its architecture, which is very unlike that of any other temple in Ceylon. Motor-cars can proceed within $\frac{1}{4}$ m. of Lankatilaka, but the latter portion of the road is rough, and only fit for traffic in dry weather.

There are many other pleasant drives and rides to be taken in the neighbourhood of Kandy.

With a motor many delightful and more extensive excursions can be made. The extensive plantations of cacao on the banks of the Mahaweli-ganga, a few miles below Kandy, deserve a visit.

(1) To Kurunegala, *via* the (16 m.) Galagedera (R.H.) Pass and Weuda (R.H.), where there is good snipe-shooting in season.

(2) To (15 m.) Teldeniya* (R.H.). 6 m. from here is the Medamaha Nuwara Peak, on which is an old Sinhalese Fort and City of Refuge. The road leads on

(3) To Madugoda (R.H.), thence by a minor road to Weragantota (R.H.), in the Central Province. The Mahaweli-ganga is crossed

by a ferry (not fit for motors) to Alutnuwara (see p. 666), in the Uva Province. The traveller is now in the Bintenna country. The straight course due north taken by the river is remarkable.

Burrows' *Visitors' Guide to Kandy and Nuwara Eliya*, also Dr Willis's guide-book, may be consulted with advantage.

ROUTE 2.

COLOMBO TO NUWARA ELIYA, BANDARAWELLA, BADULLA, and BATTICALOA.

(Rail to Nuwara Eliya; carriage to Badulla; or, *alternatively*, rail to Bandarawella; coach to Badulla and on to Batticaloa—total distance 274 m.)

This route so far as Peradeniya junction is the same as Route 1. (There is a sleeping-car on the night mails between Colombo and Nanu-oya.)

The line then continues to 78 m. **Gampola** * (1573 ft.) (R.H.). From here a road strikes off to Nuwara Eliya (see p. 664).

87 m. **Nawalapitiya** (1913 ft.), whence a road leads to (22 m.) **Talawakelle** (see below).

From that point the stations are on a constantly rising level to

108 m. **Hatton station**, * 4141 ft. above the sea.

At Hatton roads from Navalapitiya Dickoya (including Maskeliya and Bogowantalawa) and Talawakelle meet.

The drive to **Talawakelle** * (3932 ft.) (12 m.) (see p. 664) is very

pleasant. The traveller gets good views of the very pretty *Devon Falls* and the magnificent *St Clair Falls*. A motor-car may be hired at the Talawakelle Engineering Works. Passengers are also conveyed by motor-lorry which leaves Talawakelle for Diyagama (17 m.) both morning and evening.

From Hatton the ascent of **Adam's Peak** (7420 ft.), the most celebrated, though not the highest, mountain in Ceylon, is most easily made. It is an expedition of much interest, and the wonderful shadow cast by the peak at sunrise is a sight which will repay the trouble and fatigue. Camoens refers to the peak in his *Lusiads*. The manager of the Adam's Peak Hotel at Hatton makes all arrangements for the visitor. A moonlight night is generally chosen. It is a very beautiful drive of 12 m. to Maskeliya (4200 ft.) and 14 m. to **Laxapana**. * From here it is 8 m. to the top, the first five fairly easy going, and the last three rough, and possibly likely to be trying to any persons easily made giddy, though the worst places are protected, and chains of very old date facilitate the scramble to the actual summit. Stout boots and warm clothing are needed for the trip, and blankets should be taken up from the hotel—also means of making tea on the summit, which is only 150 ft. sq., and where a few Buddhist monks live. Under a wooden canopy is the sacred object of the pilgrimage—an impression of the foot of Buddha on the natural rock. It is about 5½ ft. long and 2½ ft. broad, and varies from 3 in. to 5 in. in depth.

Hatton is also the point from which the great tea-districts of Dickoya and Dimbula may be most conveniently visited. These valleys, formerly celebrated for their production of coffee, are now entirely devoted to tea cultiva-

tion. About the year 1870 the coffee plantations were attacked by a new fungus, *Hemileia vastatrix*, which choked the breathing pores of the leaves and gradually exhausted the energies of the plant. It was at first little regarded, but in ten years' time it had well-nigh destroyed the production of coffee, and reduced the planting community to a state of ruin. The revenue of the island fell from over Rs.17,000,000 in 1877 to Rs.12,161,570 in 1882, and large numbers of the wealthiest proprietors lost their estates, or remained on them merely as managers for their creditors. With indomitable energy the planting community set itself to work to remedy the disaster, and by the substitution of tea for coffee they may be said to have thoroughly succeeded in doing so—though, of course, not without great individual loss and suffering. In 1875 only 282 lb. of tea were exported from Ceylon. The export of 1915 amounted to 215,000,000 lb., while the revenue of the colony now trebles the amount received in 1877.

The valley of Maskeliya, a more newly-planted District, is separated by a ridge from that of Dikoya, to which it is parallel. The Dimbula valley is traversed by a road from Nawalapitiya to Nuwara Eliya, into which a branch road from Hatton leads.

On leaving Hatton the train passes through the longest tunnel on the railway. Just after the 114th mile the very fine *St Clair Falls* are seen on the left (see p. 663).

116 m. Talawakelle station (R.H.).*

The Horton Plains (see p. 665) may be reached by this route, by coach to Diyagama (17 m.), thence on foot or horseback (6 m.).

From Talawakelle the line again rises steadily to .

128 m. Nanuoya station¹ (5291 ft.). This is the junction for the narrow-gauge railway, which rises 1000 ft. in its last 6½ m., to Nuwara Eliya (135 m.) and Rágala. For persons who prefer to drive to Nuwara Eliya, from Nanuoya there is (4½ m.) a good road, with an ascent of 1000 ft. A carriage or car can be obtained from the Grand Motor Works, Hill Club, or Messrs Taylor & Co.

4½ m. the town of Nuwara Eliya,* the sanatorium of Ceylon, is 6199 ft. above the sea-level. The summer residence of the Governor, the Club, and Hotels are to the N.W. of the lake. Much of the ground about Nuwara Eliya is open and moor-like, and is thickly dotted with bushes of crimson rhododendron. The eucalyptus and the wattle have been largely planted about Nuwara Eliya, and give the landscape a peculiar character, which has also a somewhat Italian air imparted to it by the numerous *keena* trees (*Calophyllum tomentosum*), which, though not a conifer, has a great general resemblance in its habit of growth to a stone-pine. Nuwara Eliya possesses a beautiful park and one of the finest golf-courses in the East. It is also the headquarters of the Ceylon Fishing Club. The streams in and around Nuwara Eliya are well stocked with rainbow trout, which afford good sport in the open season (May–October). In the beautiful climate of this station expeditions of all sorts may be enjoyed.² The finest are:—

(1) Round the *Moon Plains*, 5 m. (2) To the top of *Ramboda*

¹ Travellers are recommended to have warm wraps with them, as the temperature here is very much lower than that of the plains, or even of Kandy.

² Burrows' *Visitors' Guide to Kandy and Nuwara Eliya* is a useful handbook.

Pass and back, 3 m. (3) Round the Lake, 6 m. To Hakgala (see below), 6 m. *Pidurutalagala*, the highest mountain in Ceylon (8280 ft.), may be easily ascended from Nuwara Eliya. There is a bridle-path to the top, whence the view is extensive, but not specially striking.

(4) A longer excursion is that to the Horton Plains, 18 m. from Nuwara Eliya (see also under Talawakelle, p. 664), *via* Blackpool and the Elk Plains. The easier route is by train to Pattipota, where there is a R.H., and thence by foot or on horseback: distance 6 m.

This excursion will take at least two days, one to go and one to return, and must be made on horseback. A bridle-path through wild and beautiful scenery terminates at a large R.H.* in the neighbourhood of which are tremendous precipices, which descend to the great plain of the Kalu Ganga. At the "World's End," $\frac{3}{4}$ m. easy walk from the R.H., along a charming jungle path, there is a very striking view. The mountains, Totapala and Kirigalpotta (the highest peaks in the island after *Pidurutalagala*), may be ascended from here. The path to the summit of the latter (about 2 hrs. from R.H.) is somewhat difficult; a guide should be taken. The view is magnificent.

(5) A drive out to Kandapolla (6 $\frac{1}{2}$ m.) is very agreeable on a fine day.

(6) The Botanic Gardens at Hakgala, 6 m. (see below on road to Badulla).

From Nuwara Eliya the traveller may return to (35 m.) Campola (p. 663) by the Ramboda Pass. The pass is negotiated by a series of zigzags on a very severe gradient, with dangerous corners. A number of very pretty waterfalls are seen at (15 m.) Ramboda (R.H.).

Just before entering Campola the Mahaweli-ganga is crossed by

a fine suspension bridge, erected in 1859.

The drive from Nuwara Eliya to Badulla is extremely picturesque, but is seldom taken since the railway has been opened to the latter place.

On leaving Nuwara Eliya the road rises slightly after quitting the lake, and then commences a continuous and for the most part very steep descent of several thousand feet. At 6 m. from Nuwara Eliya we reach the *Botanic Gardens at Hakgala* (which derives its name from the resemblance the bare rock above has to a human jaw), a visit to which ought on no account to be omitted by any one making a stay, however short, at Nuwara Eliya. The visitor is equally repaid by the beauty of the views from the gardens, and by the beauty of the gardens themselves, in which all the flowers and plants of temperate climates flourish freely, combined with much beautiful natural vegetation. Behind the Hakgala gardens rises the precipitous wall of bare rock which forms the face of the Hakgala mountain, whilst in front the ground sinks abruptly to valleys and low hills far below, and backed in the distance by the mountains of Uva. A distant view of the camp where the Boer prisoners were confined is to be had from the gardens. The road continues to descend very rapidly to (13 m.) *Wilson's Bungalow* and to Wellimada (R.H.), a picturesque village, from which a public road branches off to the right to Bandarawella (10 m.).

26 m. Etampitiya, where we are again on the same level as Wilson's Bungalow. The traveller cannot fail to be struck by the extent of terrace-cultivation in the valleys traversed, the steepest hillsides being fashioned into an endless series of narrow terraces, carefully irrigated, on which abundant

crops of paddy are grown. From Etampitiya the road again falls continuously, until, after passing Dikwella, where it is joined by the road from Bandarawella, it reaches (37 m.) Badulla (see below).

The main railway from Nanuoya continues to

138 m. Pattipola station. A bridle-path (6 m.) leads to the Horton Plains (see p. 665). Shortly after the train reaches the summit level (6219 ft.). It then enters a tunnel, and emerging, a most magnificent view of the Uva country is disclosed with dramatic suddenness to the left.

153 m. Haputale station (4853 ft.) (R.H.) (see p. 671).

156 m. Diyatalawa station (4367 ft.). Below, to the left, is seen the Boer Camp, where about 5000 prisoners were confined during the war. It has been used as a military training camp and sanatorium for the sailors of the East India Station.

161 m. Bandarawella station (4036 ft.) (R.H.*), the terminus of the main railway.

About 10 m. from Bandarawella are the headquarters of the Errebodde Hunt Club, where the jackal is hunted from October to January. Particulars may be obtained at the Hill Club in Nuwara Eliya.

9 m. out of Bandarawella, on the way to Badulla, a road breaks off to the right to (10 m.) Ella, where there is a R.H. most beautifully situated. This may be made the object of an excursion from Bandarawella, or the traveller may continue by this road to (18 m.) Passara (see below) through very fine scenery.

A coach takes the traveller on to 18 m. BADULLA (R.H.*), the capital of the Province of Uva, one of the oldest, most cheerful, and most attractive towns in

Ceylon. It is situated on a slight eminence, entirely surrounded by green paddy-fields, and in the immediate vicinity of a fine river, while on all sides the background is formed by mountains of very beautiful outline.

Fine avenues of *Inga saman* and other trees adorn the town, which, besides the usual Government buildings — Kachcheri, Government Agent's residence, etc. — contains a handsome market and a fine hospital. There is also an exceedingly pretty race-course surrounding a small lake. It is in the centre of a very flourishing group of tea-estates. The church and *old* churchyard merit a visit. The fine Dunhinde Waterfall is only $3\frac{1}{2}$ m. away, but is rather difficult of access.

Of the ancient city few traces remain. Not a vestige is to be seen of the palace of the kings, and scarcely any indication of any buildings of considerable antiquity. There are, however, two large and wealthy Buddhist temples, the *Mutiayangane Vihara* and the *Kataragame Dewale*, which, though the present edifices are of no very great age, are picturesque and worth a visit. They occupy ancient sites, and the dagoba at the *Mutiayangane Vihara* is undoubtedly of very early origin.

A very interesting excursion may be made from Badulla to Alutnuwara, 25 m. N., on the Mahaweli-ganga, where there is an ancient dagoba in the midst of fine scenery. Alutnuwara may also be reached from Kandy, and one of the views on that route at the head of the sudden descent to the great eastern plain is among the finest in Ceylon (p. 663).

Leaving Badulla, the road, which passes chiefly through fine tea-estates, rises rapidly to

27 m. Passara (R.H.). From here the traveller may return to Bandarawella by a short road by

Ella through beautiful scenery (see p. 666).

Proceeding, the road continues through some of the finest scenery in Ceylon to

36 m. Lunugala (R.H. *). Here the road descends. Nothing can exceed the beauty of the drive between this place and

48 m. Bibile (R.H.), a good starting-point for excursions into the wild and beautiful country to the E. and S. (see p. 690). There are some springs of warm water near here. We are now in the Vedda country, and either here or at the next following Rest-Houses,

47½ m. from Badulla iron bridge Ekiriyanakumbura (R.H.) or

57 m. Kalodai (R.H.) the traveller is likely to meet with some of these singular specimens of humanity. They are a remnant of the aboriginal inhabitants of Ceylon, and are divided into two classes—the Rock and the Village Veddas. The Rock Veddas are absolute savages, who remain concealed in the forests, and are rarely seen by an European eye—indeed few now exist. The Village Veddas, though often indulging their migratory instincts, live in collections of mud and bark huts, in the vicinity of which they carry on some rude cultivation.

67 m. Maha Oya (R.H.). Small hospital and dispensary. A very pretty R.H. on the borders of a tank, with excellent shooting in season. Here, at some distance off in the jungle, is a spring of hot water.

80 m. Tumpalancholai (R.H.).

83 m. a road to left leads to Rugam Tank, about 1½ m., restored by Sir H. Ward, and now irrigating a large tract of country. From Bibile to Kumburuwella the

traveller passes through what is known as the Bintenna country, where good shooting may be had in season.

93½ m. Chengaladi (R.H.). We have now entered a country almost wholly inhabited by Tamils and "Moors," as the Sinhalese Muhammadans are called. The familiar dagoba is no longer seen in the villages, and its place is taken by the Hindu pagoda or the mosque. From Rugam onwards the country is highly cultivated and populous.

At Chengaladi the road from Badulla joins the North Coast road; distance to Trincomalee, about 74 m. (eight ferries to be crossed). Mutur (small Rest House, ½ m. off the North Coast road), on the S. of Koddigar Bay, about 57 m. from Chengaladi, is famous as the scene of the capture of Robert Knox, the author of *An Historical Relation of the Island Ceylon*, by Robert Knox, a captive there near twenty years (1660-1679), published in 1681.

From Chengaladi the road turns sharply to S.E. to

103½ m. Batticaloa (R.H. *), the capital of the Eastern Province. Batticaloa is situated on an island in a remarkable salt-water lake, which extends for over 30 m. in length by from 5 m. to 2 m. in breadth, and is separated from the sea by a broad sandy belt now rich with coconut groves, and swarming with Tamil and Moorish villages from one end to the other. The approach to the town by a causeway across the lake is picturesque. The walls of the small old Dutch fort, now containing the Kachcheri, are well preserved. Batticaloa is famous as the abode of that singular natural curiosity the "singing-fish." On calm nights, especially about the time of the full moon, musical sounds are to be heard proceeding from

the bottom of the lagoon. They resemble those which are produced by rubbing the rim of a glass vessel with a wet finger. The writer has never heard more than two distinct musical notes, one much higher than the other, but credible witnesses, such as Sir E. Tennent, assert that they have heard a multitude of sounds, "each clear and distinct in itself, the sweetest treble mingling with the lowest bass." The natives attribute the production of the sound to the shell-fish *Cerithium palustre*. This may be doubtful, but it is unquestionable that the sounds come from the bottom of the lagoon, and may be distinctly heard rising to the surface on all sides of a boat floating on the lake. If a pole be inserted in the water and its upper end applied to the ear, much louder and stronger sounds are heard than without such aid.

The edible oyster is good and plentiful here.

The Tamils call Batticaloa "Tamarind Island," from the graceful tamarind tree which is frequently seen.

A steamer N. or S. about the Island leaves Batticaloa on advertised dates. During the N.E. monsoon the steamer calls at Kalkudah (R.H.), 20½ m. N. of Batticaloa, instead of at Batticaloa.

From Batticaloa there is a good road for some 68 m. to Arugam Bay, thence by track to Palutupane (p. 676), through the Yala Game Sanctuary.

ROUTE 3.

COLOMBO TO RATNAPURA and BANDARAWELLA.

(Rail to Avisawella, and on to Ratnapura, by special conveyance to Haputale (p. 671); and rail to Bandarawella; or, *alternatively*, by special conveyance the whole way. As the drive is a beautiful one, the road to Avisawella is described in place of the railway.)

For convenience of arrangement this route has been described from Colombo to Bandarawella. The long ascent, however, takes time, and the traveller who has not much leisure is recommended to go to Bandarawella by railway (Route 2), and to return to Colombo by this route.

No excursion could show more of the characteristic features of Sinhalese scenery and Sinhalese life than this. It is one strongly recommended to those having time to perform it. The journey to Bandarawella will occupy about three days—one day by train. Those who have less time to spare are strongly recommended to go as far as Ratnapura, returning to Colombo by the alternative route (No. 4) mentioned on p. 671. To Ratnapura and back by alternative route will occupy more than a day. At Maradana junction the narrow-gauge Kelani Valley Railway begins.

Leaving Colombo by special conveyance through the narrow and crowded streets of the "Pettah," a very pretty road along the S. bank of the Kelani River may be followed, or a more direct but less picturesque road across the plain to

to m. Kaduwella, a R.H. charmingly situated on a bluff of red rocks above the river at a point where it makes a sharp turn. The R.H. veranda all but overhangs the river, and commands a delightful view, enlivened by the constant passage of leaf-thatched

barges and sailing-boats, and by the picturesque groups all day crossing the river at the ferry close by. A short distance off is an ancient Buddhist temple of some size. The road continues near the river, through a rapid succession of villages and groves, to

21 m. Hanwella (R.H.), a large village with a R.H., commanding a beautiful view up and down the river. [9 m. S. of Hanwella is the tank of Labugama, which supplies Colombo with water. It is picturesquely situated among wooded hills, and well repays a visit.] The road now leaves the river and passes through country in which rubber alternates with coconut, and becomes more and more prominent, whilst here and there are patches of tea to Puwakpittya and

30 m. Avisawella station (R.H. *), surrounded by country of very great natural beauty. The railway from Colombo branches here, one section leading to Yatiyantota (R.H.), and the other to Ratnapura (R.H.), the present terminus. A further extension of this line is under construction from Ratnapura to the planting districts of Pelmadulla and Opana-aike. A road leading N. from Avisawella crosses the Sitawaka and Kelani Rivers by fine iron bridges, both commanding lovely views, and passes, by Ruwanwella (where there is an old Dutch fort converted into a very charming R.H.), through a lovely wooded and undulating country to Kegalla (p. 658).

A branch line of the railway was opened to Ratnapura from Avisawella in April 1912, to be extended to Kahawatta, 4 m. from Pelmadulla, on the road to Rakwana, the centre of a fine rubber-growing District.

44 m. Pussella (R.H.), the road crosses the Kurawiti River near the

village of Ekneligoda—in which is situated the picturesque *walawa* of Ekneligoda Dissawe, a great Sinhalese chief and landholder—and reaches

56 m. Ratnapura (R.H. *), a considerable town, the capital of the province of Sabaragamuwa, with a rainfall of fully 150 in. Ratnapura is situated in the midst of the most exquisite scenery, and the views from the summit of the fort, the bridge, and the circular road are especially recommended. A ride of a few miles up the bridle-path leading from the bridge to Gilimale will amply repay the trouble, revealing as it does the magnificent mountain-wall which rises all but perpendicularly to the N. to the height of many thousand feet. It is from Ratnapura that the finest views of Adam's Peak are to be obtained. There is a specially good one within a few minutes' walk of the R.H. Ratnapura (*ratna* = jewel) is the headquarters of the gemming industry, and the whole country is dotted with pits from which gems have been removed. Sapphires, topazes, and cat's-eyes are those most commonly found. The *modus operandi* is simple. A pit is dug, and when the *illan*, a peculiar gravel in which the gems are usually found, is reached, all that is dug up is carefully washed and sifted, and the good stones set aside. *Genuine* stones are certain to be found in large quantities, but stones of any marketable value are more rare, the greater part having only a faint shade of colour, and being disfigured by flaws. Plumbago also is mined for.

A mile or two W. from Ratnapura is the *Maha Saman Dewale*, one of the richest Buddhist temples in Ceylon, and possessed of considerable estates. Some interesting relics are preserved there, but the building itself, though picturesque, has no architectural interest. In the outer court, built into the wall, stands one of the

very few monuments of the Portuguese domination remaining in Ceylon—a slab representing the full-length figure of a Portuguese knight in armour killing and trampling upon a prostrate Sinhalese.

Ascent of Adam's Peak (23 m.) (see also Route 2).

5 m. from Ratnapura is Malwala, on the river *Kalu Ganga*.

2 m. farther up the river is Gilimale, a large village (horses as a rule cannot proceed farther).

5 m. Palabaddala, 1200 ft., halting-station of pilgrims. Here the path becomes very steep and rugged.

8 m. Hiramitipana, 4400 ft.,* halting-station at the base of the peak.

3 m. farther is the summit of the mountain (7420 ft.), where is a small permanent room built for the accommodation of the resident monks.

Leaving Ratnapura by the bridge, and not forgetting to notice the beautiful views obtainable from it, the road passes through paddy-fields fertilised by the Batugedara irrigation works, and after a drive of 12 m. reaches

69 m. Pelmadulla (R.H.), whence a road to the S. leads to Rakwana, the chief village of a rising tea-district. The views on this road are some of the most beautiful in Ceylon.

From Rakwana an interesting trip may be made Southwards to Hambantota in the Southern province. It is a riding road only, though practicable for bullock-carts in most places. As far as Maduanwela the scenery is very pretty. At Maduanwela is a very interesting specimen, the only one known to the writer of this description, of the ancient *walawas*

of the Kandyan Chiefs. It consists of several small courts built on a sort of Pompeian plan, the small rooms looking into the court, which, as at Pompeii, is in every case furnished with an impluvium. There is a small private chapel (Buddhist), and the massive outer door, made of one huge piece of wood, is marked by bullets and other traces of resistance to assault in older times. Within is displayed the silver staff shaped like a crozier, the badge of office of one of the ancestors of the family, who was chief Adigar or Prime Minister of the King of Kandy. Afterwards the track leads chiefly through thick forest and jungle, attractive to the sportsman as being a great resort for elephants and deer. After passing the irrigation works on the Walawe River, the main road between Galle and Hambantota is joined at Ambalantota (see p. 675).

The woods about Pelmadulla, at the proper season, are bright with the splendid blooms of the *Dendrobium Maccarthii*.

85 m. Balangoda (R.H.). Nothing can exceed the beauty and variety of the scenery along the whole road from Ratnapura to this place. It is entirely free from that monotony which sometimes renders the most luxuriant tropical scenery oppressive and wearisome.

97 m. Belihuloya. There is a good R.H. here, romantically situated on the edge of a rushing mountain stream. From this spot an ascent can be made to the Horton Plains (see Route 2). The road leads into coffee- and tea-estates, whence the whole of the wood has been cleared, and the bare hillsides now lack all trace of their original beauty. But the crops are fine, and coffee has not in this part of Ceylon been so wholly exterminated as elsewhere by leaf disease. Ever since leaving Pelmadulla the

road, though varied by occasional descents, has been rising, and by the time it has reached

105 m. Haldummulla (R.H.) it has gained a very considerable elevation, from which a truly magnificent view is obtained over all that part of the island lying between Haldummulla and the sea to the S. With few exceptions, the eye seems to range over an unbroken extent of forest, the rivers, villages, and tracts of cultivation being for the most part concealed by the trees surrounding them.

From Haldummulla the traveller may proceed to Koslande (R.H.), thence, passing the very fine Diyaluma Waterfall *en route*, to Wellawaya (R.H.). Tellula, some 10 m. to the S., is the nearest point possible for shooting headquarters.

A very steep road of about 8 m. ascends to the top of the pass at Haputale (R.H.), on the railway line, at an elevation of 4765 ft. The view hence is even grander than that from Haldummulla, but from partaking of a greater extent of the nature of a bird's-eye view, it is less picturesque. By road or rail the traveller proceeds to

120 m. Bandarawella (R.H.★) (p. 666), which is said to enjoy the best and most equable climate in Ceylon. It has a hotel, and there are a number of private bungalows to let. A railway is now under construction from Bandarawella to Badulla (R.H.), passing *en route* Ella (R.H.) with a very fine view. Between Haputale and Bandarawella on the railway lies Diyatalawa, where some 4000 Boer prisoners were located in the Boer war. It is now used as a sanatorium for the East Indies Naval Squadron and for the troops in Ceylon.

ROUTE 4.

COLOMBO TO RATNAPURA *via* Panadura and Nambapane.

(Rail and road.)

This is an alternative route to Ratnapura, but somewhat longer. It passes through very pretty country, and those who go no farther than Ratnapura are strongly recommended to go by one and return by the other of these routes.

The traveller proceeds as far as Panadura by the Southern Railway from Colombo (see Route 5), and thence proceeds by coach or private conveyance.

A few miles after quitting Panadura he crosses the Bolgoda lake by a bridge, and at

10 m. reaches Horana. The R.H. here is built among the remains of an ancient Buddhist monastery, and on the opposite side of the road is the large and handsome Buddhist temple. It contains a bronze candlestick worthy of notice. It is about 8 ft. high, and of remarkably fine workmanship.

28 m. Nambapane (R.H.), prettily situated. The road here approaches the Kalu Ganga River, along the bank of which it passes as far as the Kuruwiti River, which it crosses. The road now keeps at a greater distance from the river, though it follows its general course till it reaches

42 m. Ratnapura (R.H.★) (see p. 669). Shortly before arriving at Ratnapura the Maha Saman Dewale is passed (see p. 669). The whole road is extremely

beautiful, and cannot fail, if the day be fine, to give pleasure to those passing along it. Fine views of Adam's Peak and the other principal points of the Central Mountains are to be obtained on this route.

ROUTE 5.

COLOMBO TO GALLE, MATARA, Hambantota, and Tissamaharama.

(Rail to Matara; thence special conveyance. Beyond Kirinde ride.)

The journey is worth making, at all events so far as Galle or Matara, for the sake of the coast scenery. As far as Matara it can be performed by rail, but it is unnecessary to say that much is lost by adopting this mode of travelling. The first six stations—namely, the Pettah, the Fort, Slave Island (the drive from Galle Face Hotel to this station is about $\frac{1}{4}$ m.), Kollupitiya, Bambalapitiya, and Wellawatta, are all in the suburbs of Colombo.

At 7 m. Mount Lavinia station is the Grand Hotel, which was built by Sir E. Barnes, when Governor, as his Marine Villa. It stands on a rocky eminence close to the station. It is a very favourite place to stay at, and has first-rate accommodation. The Colombo Fort station is the most convenient starting-place for a run by train out to Mount Lavinia.

17 $\frac{1}{2}$ m. Moratuwa station is a very flourishing place. It is justly celebrated for its wood-carving.

21 m. Panadura station (R.H.), a flourishing village prettily situated on a narrow inlet of the sea (see Route 4).

26 m. Kalutara station (R.H. ★) is approached by a fine iron bridge over the Kalu Ganga. It is over 1200 ft. long, being composed of twelve spans of 100 ft. each. Kalutara is a large place, with a great air of cheerfulness and comfort. The R.H. is a good starting-point for the excursions which may be made over excellent roads into the very pretty country to the E. of the town. There is an interesting Buddhist temple on the N. side of the river. Snipe and whistling teal are plentiful from November to February. The hog-deer (*Cervus porcinus*), not found anywhere else in Ceylon, is said to have been introduced into the Kalutara District by the Dutch from its home in the Ganges Delta.

The Mangosteen grows well in Kalutara. Its fruit, at once pleasing to the eye and delicious to the palate, is recommended to the attention of the traveller. The neighbourhood is now most celebrated as the locality where Para Rubber is most successfully grown in Ceylon.

Plumbago, or graphite, is largely mined for in the Kalutara District.

41 m. Bentota station (R.H. very good) was at one time the railway terminus, and from thence the journey to Galle had to be made by road. The drive is charming, always near and generally within sight of the sea, and passing under an uninterrupted grove of coconut and other trees. The district is extremely populous, and the traveller is rarely, if ever, out of sight of a house or two, while villages of greater or less size are of constant occurrence. Bentota is celebrated for its edible oysters.

54 m. Ambalangoda station serves a large and rapidly increas-

ing village. The R.H. (very good) is close to the sea, and has a good bathing - place among the rocks below it.

61 m. Hikkaduwa station.

65 m. Dodanduwa station. There is a fine Buddhist temple here in a somewhat unusual position, approached by a long, narrow, and steep flight of stone stairs.

72 m. GALLE station * was the principal port of call for vessels between Aden and the far East, before the completion of the break-water at Colombo. The harbour at Galle is very small and not very safe in rough weather. The entrance is so narrow as to be hardly visible until very near. *The Lighthouse* is about 60 ft. high. To the E. there is a hill 2170 ft. high called the Haycock, and in the distance to the E.N.E. Adam's Peak, 7420 ft. high, is often seen. The Haycock is known in Sinhalese as "Hinidum Kanda." It is about $1\frac{1}{2}$ m. from the Rest House at Hiniduma. There is a winding path by which the summit of the hill can be approached. The landing-place at Galle is on the N. side of the harbour. The deep water comes close into the shore. *All Saints' Church* is about a furlong from the landing-place. It is a handsome stone building of pointed architecture, and can seat 500 persons. The ramparts of the old fort form a charming promenade towards the sea. The population of the town, according to the last census, is 40,000. The harbour is entered yearly by some 164 steamers, with a tonnage of 359,495 tons.

The place is hardly mentioned in the native chronicles before 1267. Ibn Batuta, in the middle of the 14th century, calls it a small town. It was not till the Portuguese occupation that it rose to importance. When the Dutch succeeded the Portuguese they

greatly strengthened the fortifications, which had been vigorously defended against their Admiral, Kosten. The magnificent old Dutch fort, which encloses the older part of the town, is in almost perfect preservation. In the marriage treaty of the Infanta of Portugal with Charles II. of England it was agreed that if the Portuguese recovered Ceylon they were to hand over Galle to the English, but they never did recover it.

The name of Galle is from the Sinhalese *galla*, a rock; but the Portuguese and Dutch settlers derived it from the Latin *gallus*, a cock, and carved an image of a cock on the front of the old Government House, now occupied by an European firm, which dated from 1687. The present Government House is the "Residency," which is about $\frac{3}{4}$ m. from the fort. The oldest Presbyterian church and cemetery in Galle bear the date 1796. The environs of Galle are charming, and a number of pleasant and interesting excursions may be made among them. The scenery is always delightful, and there are many old and curious Buddhist monasteries to be explored. Buddhism is here seen in its best aspect. The monks are far more austere and more intelligent than in the Kandyan provinces, and the religion seems to exercise a greater influence over the lives of the people.

Akmeemana is about $5\frac{1}{4}$ m. from the fort. It is known as "Gabadagama" (granary) of the Galle Four Gravets. Paddy growing is very systematically carried on. At one time there was a sitting Magistrate here; he is said to have held Court at the old R.H. premises. There is at present a Gansabhawa. The headworks of the Galle water supply are about $2\frac{1}{2}$ m. from the Gansabhawa. They are known as "Hiyare Waterworks."

Wackwella is about 5 m. from the fort. There is a fair R.H. on the banks of the Ginganga. Tourists frequent this place for angling and snipe shooting.

The Pettah is a busy centre of native traders about $\frac{1}{2}$ m. from the fort. There is an orphanage for girls known as "Buona Vista" in Unawatuna, in Talpe Pattu.

There is a fine Catholic cathedral on Mount Calvary Hill at Kaluwella, known as St Mary's.

91 m. Weligama station (R.H.), a populous and thriving village, beautifully situated on the lovely little bay of the same name. Half a mile before entering the village, on the right-hand side of the high road from Galle, is a remarkable rock-cut colossal statue of a Sinhalese king in perfect preservation. The statue is popularly styled that of the "Leper King," but the legends attached to it are obscure and contradictory.

The road continues along the sea-shore, through an almost uninterrupted grove of coconut trees, which overshadow a constant succession of picturesque fishing villages. The whole District is densely populated, and the drive one of the most charming character. The journey is worth making for the sake of the coast scenery, especially in the vicinity of Tangalla. As far as Matara it can be performed by rail. The best way to see the country is to travel by motor along the coast road.

101 m. Matara station, the railway terminus,* the birthplace of Sir Henry Lawrence, 1806, a large and flourishing town of about 17,000 inhabitants. The Nilwala Ganga is here crossed by a fine bridge. Matara itself is a particularly pretty and pleasing town, and is the residence of many of the oldest and richest Sinhalese

lowland families. In the fort there is a R.H. and a handsome clock tower.

At Matara there is a Buddhist hermitage called Chula Lauka. It is an islet connected with the mainland by a causeway, and founded as a Buddhist seminary by a Siamese Prince Priest.

A motor-bus is available for travellers along the coast to Hambantota; a horse coach to Hakmana inland; and a motor-bus to the hill-country in the Deniyaya planting District.

104 m. Dondra, a fishing village situated on the southernmost point of Ceylon. There was here a stately temple, destroyed by the Portuguese, of which few fragments now remain. There is, however, in the modern vihara a fine gateway elaborately sculptured, and about $\frac{1}{2}$ m. to the N. is a stone cell in perfect preservation. On the point itself, about 1 m. to the S. of the road, is a magnificent lighthouse, erected at great cost in 1889.

The villages, though still frequent, now become fewer in number.

114 m. Dikwella (R.H. good). About 1 m. inland is the Wewrukannala temple, a shrine greatly revered, where a remarkable number of statues and tableaux have recently been placed. The temple is very interesting as showing the modern tendency of popular Buddhist religious art.

122 m. Tangalla, a pretty town with a remarkably good R.H. close to the sea. Tangalla is a great place for catching turtles.

N. of Tangalla are the extensive irrigation works of the Kirama valley and the large tank of Udukiriwila, a few miles to the S. of which is situated one of the oldest and most remarkable Buddhist monasteries in Ceylon. — Mulgirigala, an isolated rock

rising abruptly from the plain, and honeycombed with caves and temples.

130 m. Ranna (R.H. good). About a mile before reaching it we see on the S. a picturesque Buddhist temple on the summit of a high, wooded rock.

The population now becomes far more sparse, and the country is covered with scrub jungle.

140 m. Ambalantota (R.H. good), a small village on the banks of the Walawe River, a noble stream here shrouded in dense forest, and crossed by a long iron bridge.

10 m. N. of Ambalantota are the headworks of the Walawe Irrigation Scheme. A massive stone dam, constructed by Government, diverts part of the stream into a system of canals and channels, which convey water for agricultural purposes for many miles on the W. bank of the river.

The road now passes through a desolate country to

148 m. Hambantota (R.H.), the chief place of an Assistant Agency, a small town on a small, open bay. Here are the headquarters of the District, the Assistant Agent's residence, the Kachcheri, Court-house, etc. Here, too, is one of the two chief salt manufactories in Ceylon. A great part of the population are Malays. In the immediate vicinity of the town are sand-hills (which long threatened to overwhelm the town, and have, in fact, buried several streets), the old post-office, and some other buildings. Their onward progress is now checked by the growth of a peculiar grass, and by plantations of the palmyra palm.

About 20 m. N.E. of Hambantota is Tissamaharama, one of the oldest of the abandoned royal cities of Ceylon. Except as a place of pilgrimage, the site had been wholly abandoned till the re-

storation of three tanks by the Ceylon Government. From these tanks nearly six thousand acres are now cultivated in paddy, and both population and the area under cultivation are annually increasing. The ruins are of great antiquity and interest. One of the oldest and largest of the dagobas, over 150 ft. high, which was in a very ruinous condition, has been entirely restored by the unassisted labour of the Buddhist population. There are several other very large dagobas, mostly in ruins, and some smaller ones in fair condition. The remains of large buildings are numerous, and the ruins of what is styled the King's palace, but is more probably the lower storey of a many-storeyed monastery like the *Brazen Palace* at Anuradhapura (p. 681), are worthy of notice. They consist of rows of huge monolithic columns, much larger than any at Anuradhapura or Polonnaruwa. Ruins are everywhere scattered through the dense forest, and excavations here would probably be better repaid than at any other spot in Ceylon.

There are two ways of reaching Tissamaharama from Hambantota—

(1) The easiest route is that by the high-road to Badulla. On leaving Hambantota the great *lewayas*, or natural salt-pans, whence great amounts of salt, a Government monopoly, are annually taken, are passed. When the salt has formed in them they present the appearance of frozen lakes covered with snow of dazzling whiteness.

15 m. Wirawila (R.H.). The high-road is here left, and about 5 m. of metalled road conduct the traveller to the R.H. above the tank.

(2) A more interesting, but from Bundala (12 m.) onwards a difficult, route is along the coast 21 m. to Kirinde, a small port of

picturesque appearance. There is a road thence to Tissamaharama, about 8 m. in length, which passes many remains of antiquity.

6 m. beyond Kirinde, along the coast, is Palutupane, an excellent centre for shooting excursions, as elephants, wild buffaloes, bears, leopards, deer, and peacocks abound in the wild and unpeopled forests and plains around it. There are also antiquarian remains of considerable interest scattered through the jungle.

From Palutupane there is a track, good for horses and generally passable for a rough bullock-cart, to Batticaloa (130 m.) (see p. 667). The forest scenery on the *Yala River* is very beautiful, and the whole route presents great attractions to the sportsman.

ROUTE 6.

COLOMBO TO TRINGOMALEE by Negombo, Puttalam and Anuradhapura.

(Railway to Chilaw; motor-coach service from Chilaw to Puttalam; thence by special conveyance.)

The railway to Chilaw having been opened, the former coach and steamboat services from Colombo have been discontinued.

13 m. Jaela (R.H.).

23 m. Negombo (R.H. *), a thriving town (population 20,000), picturesquely and singularly situated among lagoons and canals—a true Dutch settlement. There is a picturesque Dutch gateway, which “improvers” have, happily, as yet failed to remove, and a banyan tree of magnificent

dimensions. The brass work of Negombo is celebrated; also its prawns. The whole District between Colombo and Negombo is densely inhabited. The innumerable villages are scattered through coconut groves, cinnamon gardens, and groves of jack-fruit. The artist and the photographer can find at every corner of the countless roads and lanes an inexhaustible variety of vignettes of striking beauty. Leaving Negombo, the road crosses the Maha Oya by a fine bridge, about 400 ft. in length, and proceeds through luxuriant coconut groves and tobacco plantations to

36 m. Maravila (R.H. *), 1½ m. from Nattandiya station: a village rapidly increasing in size and importance. Near it is an enormous and very costly Roman Catholic church. One of the most striking features on this route is the number and size of the Roman Catholic churches, erected for the most part by the people of the fishing villages along the coast, who almost all profess that religion.

41 m. Tinnipitiyawewa tank, one of the most successful irrigation restorations of the Ceylon Government, is passed (right).

48 m. Chilaw (R.H. good), another large town with a District Court. It is the present terminus of the railway. Here again is another huge Roman Catholic church. A large Hindu temple at Muniseram, in the neighbourhood, is worth a visit. There is a road from Chilaw to Kurunegala (p. 678) passing Dandagamuwa, where there is a picturesque temple. 4 m. beyond Chilaw the great river Deduru Oya is passed by an iron bridge. A good road, through a sandy and uninteresting country, which, however, is being rapidly covered

with thriving coconut plantations, leads to

59 m. **Battulu Oya** (R.H. fair), another large river, crossed by an iron bridge, and then continues its way through country of a similar character to

80 m. **Puttalam** (R.H. good), a considerable place, the headquarters of an Assistant Government Agent. What gives Puttalam its importance is the existence of the largest salt-pans in Ceylon. The island is mainly supplied with salt from this place or Hambantota. The process of manufacture and the salt-pans are well worth seeing if the visit to Puttalam is made at the right season, i.e., from June to September. Salt is a Government monopoly. It is manufactured here and at Hambantota, and thence retailed throughout the island. On the tongue of land which lies between Puttalam Lake and the sea is St Anna's Roman Catholic Church. On the Saints' festival, about 29th July, enormous crowds go thither on pilgrimage — all sorts and conditions of people—Buddhists, Muhammadans, Hindus, as well as Roman Catholics and other Christian sects; a regular town of palm huts is formed for their accommodation.

A canal connects Puttalam with Negombo and Colombo. It is much used for the transport of salt and copra.

Another road leads from Puttalam along the coast to Manaar; it runs through very wild country, and is not much used, being for the greater part of the distance a natural track through the jungle.

The road after leaving Puttalam strikes inland, and proceeds through a thinly populated jungle district. There are no Rest Houses this side of Anuradhapura nor any villages where supplies can

be obtained. The road, however, is good and often used by motors.

At 103 m. **Kala Oya**, there is an unfurnished Circuit Bungalow of the P.W.D. The *Kala Oya River* is here crossed by a bridge 55 ft. above the ordinary level of the stream, which was, nevertheless, carried away by a flood in 1885.

127 m. **Anuradhapura** (Hotel) (see p. 681). Here the railway is joined (see Routes 7 and 8). The road from Anuradhapura to Trincomalee passes through

135 m. **Mihintale** (R.H.) (see p. 684). After leaving Mihintale the road (constructed 1886) passes through a thinly inhabited country, the villages, with their tanks and cultivation, being sparsely scattered through the forest.

160 m. **Horowapotane** (R.H.). A large tank and village.

177 m. **Pankulam** (R.H.). A few miles beyond Pankulam, on the right of the road, and half a mile from it, are the remarkable hot springs of Chimpiddi (Kanhya). They are nine in number, but, though of different temperatures, rise close together in one ancient stone basin. They are considered equally sacred by Buddhists, Hindus, and Muhammadans, and the ruins of a dagoba, a temple of Vishnu, and a mosque stand together in the immediate vicinity.

192 m. **Trincomalee** (see p. 688).

ROUTE 7.

COLOMBO TO KANKESANTURAI
vid Polgahawela, Kurunegala,
Anuradhapura, and Jaffna.

(Rail, 256½ m., opened 1904-5.)

The road from Colombo to Anuradhapura (161 m.), *vid* Kegalle and Kandy, is preferable to the shorter road (129 m.) from Colombo *vid* Kurunegala to Anuradhapura.

The route from Colombo to

45 m. Polgahawela junction (R.H.) is described in Route 1.

58½ m. Kurunegala (R.H.), the chief town of the North-Western Province, is situated at the back of a chain of rocks, which from their fancied resemblance to animal forms bear such names as **Etagala**, or **Elephant Rock**, **Ibbagala**, or **Tortoise Rock**, **Andagala**, or **Eel Rock**, etc. Kurunegala town itself is situated at the foot of **Etagala**—an enormous black boulder over 1000 ft. in height, resembling the head and shoulders of an elephant. From the top of this rock a noble view is obtained. At its foot is an artificial lake. 12 m. N.E. of Kurunegala is the **Ridi** (or silver) **Vihare**, a very ancient Buddhist monastery, most picturesquely situated at a considerable elevation. It contains a large and rare collection of ancient ola (palm-leaf) volumes of the Buddhist Scriptures. Some of the doors of the temple are carved and inlaid in ivory.

From Kurunegala there are good

roads S.W. to Negombo and N.W. to Puttalam (see Route 6). The road from Kurunegala to Negombo, passing through **Narammala** (R.H.) **Dambadeniya**, **Giriulla** and **Welihinda** is very pleasing from its varying character and constant succession of woodlands, paddy-fields and coconut groves. At **Dambadeniya**, 19 m. from Kurunegala, is a large and famous temple, close to which is a high, apparently inaccessible isolated rock, on which, according to tradition, prisoners were confined. The steps cut in the rock are, according to tradition, the work of a prisoner who attempted to escape.

13 m. from Kurunegala, on the road to Puttalam is **Wariyapola** (R.H.) 3 m. beyond this the road branches off to Anuradhapura, and 10 m. beyond to **Balalle** (R.H.) and 4 m. off a cross-road to Anuradhapura is **Yapahuwa** (=the excellent mountain), one of the most picturesque and curious of the remains of antiquity in Ceylon. It was at one time the abode of the sacred tooth in a *Dalada Maligawa* (tooth-temple); hence the tooth-relic was carried off to India, and recovered by Parakrama Bahu III. in 1288 A.D. The ruins, possibly of a royal palace, standing at the head of a great flight of steps, are quite unique; the decorative sculptures of animals and human figures are particularly fine. Its traceried windows, one of which is in the Museum at Colombo, are especially curious. **Yapahuwa** is also accessible by the railway, as it is only 3 m. from the Maho railway station on the Northern line.

14 m. from Balalle and 98½ m. from Colombo is **Galgomuwuwa** (R.H.). Near here 102 elephants were driven into a kraal, but only 45 of these were finally noosed, in 1902. The kraal held in 1910 near the same place was not so successful.

92½ m. Ambanpola.

126½ m. Anuradhapura station (Hotel) (see Route 8). The country onwards to Kankesanturai is described in Route 8.

142½ m. Madawachchiya station (R.H.). * See p. 684. The R.H. is 2½ m. from the station.

157½ m. Vavuniya-vilankulam station (R.H.) * (see p. 685).

185½ m. Mankulam station (R.H.).

222 m. Pallai station (R.H.).

245½ m. Jaffna (R.H.) (see p. 686).

256½ m. Kankesanturai station (R.H.). *

ROUTE 8.

KANDY TO JAFFNA by Anuradhapura.

(To Matale by rail; thence by road as far as Anuradhapura, where the main railway line from Colombo to Jaffna is joined; or by private conveyance all the way from Kandy to Anuradhapura.)

The railway, which crosses the *Mahaweli-ganga* by a fine bridge on leaving Kandy, takes us to

16 m. Matale terminus station (R.H. good), a large and flourishing village beautifully situated; a great cattle centre, it has one of the largest bazars in the province. Tea and cacao plantations, together with coconut and other palm-trees, and paddy-fields, mixed with indigenous scrub and

patches of jungle, form a pleasing panorama. The ground is well broken and beautifully varied with wood and cultivation. About a couple of miles out of Matale, only a few hundred yards from the roadside, is the remarkable Buddhist temple of *Alu Vihare*, which it is well worth stopping for a few minutes to visit. Huge masses of granite rock have, at some remote period, fallen from the mountains overhanging the valley. In the fissures of these boulders, at a considerable height above the road, the monastery has been constructed. It is difficult to imagine a site more picturesque or more theatrical.

30 m. Nalande. The R.H. * is prettily situated under fine trees. A steep descent leads to a bridge, a path from which, of about ½ m. to the E., conducts the traveller to the ruins of a *Hindu temple* beautifully situated. The road for the first 5 m. after leaving Nalande is very pleasing, passing through fine open woods, among the trees of which peeps of bare, rocky mountains and a rushing stream are obtained. Nalande was at one time the residence, not the capital, of Parakrama the Great, who built a fortress there. At Naula a road to the W. leads to *Elaheva*, the headworks of an ancient irrigation system of colossal dimensions.

45 m. Dambool (Dambulla) (R.H. *), a convenient half-way house by the road between Kandy and Anuradhapura: a sort of mail-coach runs from Matale to Dambool: it is a large village immediately under the huge black rock in which is situated the *Cave Temple* that makes this place famous, but which presents no great attraction to those who have seen the cave temples of India. At the same time Sir Emerson Tennent says of it: "From its antiquity, its magni-

tude, and the richness of its decoration, it is by far the most renowned in Ceylon." There is a fine view from the top of the rock. The temple has large landed possessions in the neighbourhood. There are five temples in all: they display a mixture of Hinduism and Buddhism: one has a recumbent statue of Buddha, 47 ft. long (see Mitton, pp. 42-45).

10 m. or 12 m. from Dambool is Sigiriya (R.H.), which is well worth a visit. The R.H. keeper at Dambool will afford all information and make the necessary arrangements. It is best to go overnight to Sigiriya and ascend the rock early in the morning, returning the same morning or that afternoon to Dambool. Sigiriya is a rock fortress to which the parricide King Kasyapa retired (to avoid his brother Moggallana's vengeance) in the 5th century, after obtaining the throne of Ceylon by the murder of his father, Dhatu Sena. Here he built his palace and reigned 18 years from 477, or 511 A.D. This extraordinary natural stronghold is situated in the heart of the great central forest, above which it rises abruptly, like the Bass Rock, out of the sea. There are but few traces of the hand of man remaining upon the rock, except some galleries on the N.W. side and some frescoes high up in a cavity near its summit—accessible by the aid of some iron ladders and steps cut in the rock. Copies may be seen in the Museum at Colombo (see p. 656). The Palace, the site of which is just traceable on the N.W. side, and the rock itself, are supposed to have been surrounded by a fosse; a tank still exists on the S.W. side. The Lion Staircase House, the granite throne, the Audience Hall, and the dagoba ($\frac{3}{4}$ m. from the rock, but close to the road) should also be seen. Cave's *Ruined Cities of Ceylon*, Burrows' *Buried Cities of Ceylon*,

Mitton's *The Lost Cities of Ceylon*, chap. xi., and Bell's *Administration Reports* should be studied.

3 m. after leaving Dambool the *Mirisgani Oya* is crossed by a very high bridge. Immediately after passing it the road divides. The road straight on leads N.E. to Trincomalee (see Route 9); 4 m. along this road, on the right, just opposite to a Public Works barracks, or "lines," is the turn off to Sigiriya; the branch turning to the left, N., is that for Anuradhapura and Jaffna, and passes over an undulating park-like country, and past many newly-restored irrigation works to

58 m. Kekerawa (R.H. *).

From Kekerawa an expedition should be made, 8 m. by good carriage-road, to the Great Tank of Kalawewa. * This magnificent sheet of water, with an area of about 7 sq. m., was originally formed by King Dhatu Sena about 460 A.D., who built a bund 6 m. long, 60 ft. high, and 20 ft. broad on the top. This bund retains the waters of two rivers, and forms a lake which even now, when the spill only reaches a height of 25 ft., has a contour of nearly 40 m. A great canal from one of the sluices of this tank carries water to Anuradhapura, a distance of 52 m., and supplies over 100 village tanks in its course. A few miles of the canal at the end nearest Anuradhapura were restored by Sir William Gregory more than 40 years ago, but the tank itself and the remainder of the canal remained in ruin, as they had been for many centuries, till 1884, when the Ceylon Government decided to restore them. The work was completed at the end of 1887. The bungalow of the engineer in charge commands a fine view over the lake. The ancient spill, 260 ft. long, 200 ft. wide, and 40 ft. high, is still in perfect preservation,

the tank having been destroyed, not by any failure of the spill, but by an enormous breach on one side of it—now covered by the new spill wall, a fine structure nearly 1000 ft. in length, which reflects much credit on its designer and builder, Mr W. Wrightson, of the Ceylon Public Works Department. 2 m. W. of Kalawewa is the Aukana Vihara, an ancient monastery in a wild and secluded situation, where is an enormous rock-cut standing statue of Buddha, 40 ft. high. The statue stands almost entirely free of the rock from which it is carved, and the right arm is raised and free from the body of the statue. At the foot of the bund are ruins of the very ancient city of Vijtapura, sometimes, but doubtfully, identified with Wijito.

The road from Kekerawa passes for the most part through monotonous and uninteresting forest to

70 m. Tirapane (R.H.). 4 m. farther, at Galkulama, there is a division in the road. The branch leading due N. is the direct road to Jaffna through Mihintale; that to the N.W. proceeds in nearly a straight line to

84 m. Anuradhapura (Hotel good *) (127 m. from Colombo by rail). "The buried city of Ceylon," famous throughout the East for its ancient and extremely interesting ruins—the relics of a civilisation that existed more than 2000 years ago, when the city was the capital of a succession of ancient kings; the city walls, the exact boundaries, and the royal residences have still to be discovered. The city is said to have measured 256 sq. m., i.e., 16 m. in each direction: rather, it comprised two cities, one within the other. A carriage to visit the ruins could be arranged by the manager of the hotel. Services of licensed guides to take tourists round the ruins could also be ar-

ranged on timely application to the same manager. Fees due to Guides—whole day, Rs.3; six hours, Rs.2. A bicycle is most useful. The traveller who contemplates a thorough examination of the ruins will obtain all necessary information and assistance at the Kachcheri. For such an examination the companionship of Cave's *Ruined Cities of Ceylon*, Burrows' *Buried Cities of Ceylon*, Still's *Guide to the Ancient Capital of Ceylon*, Mitton's *Lost Cities of Ceylon*, chaps. iii–ix, and Bell's *Archæological Reports* will be useful, though the ordinary traveller will perhaps find the chapter on Ceylon in Fergusson's *Eastern Architecture* sufficient for him. A certain number of the ruins lie within $1\frac{1}{2}$ m. distance of the hotel, the so-called Brazen Palace and the Bo-Tree being close to it on the E. side, and the Thuparama and Ruanwelli dagobas on the N.E. The larger Jetawanarama and Abhayagiriya dagobas lie respectively 2 m. and 1 m. N. and N.E. of the hotel. The accompanying map shows the general disposition of the ruins; they cannot be thoroughly seen in less than two days' time if a visit to Mihintale is included. The city of Anuradhapura was founded by King Pandukabhaya 437 B.C., and called after the name of the Constellation Anuradha. It became the capital of Ceylon in the 4th century B.C., and attained its highest magnificence about the commencement of the Christian era. It suffered much during the earlier Tamil invasions, and was finally deserted as a royal residence in the 9th century. A small village has always remained on the site, but it is only since the constitution of the North Central Province, in 1872, by Sir W. Gregory, that any revival has taken place in this much-neglected District. Since that date hundreds of village tanks have been restored; famine and the dreadful

disease called *parangi* (produced by the use of bad water and food) have been driven away, and the population, now 5600, of the town of Anuradhapura, is yearly becoming more prosperous and healthy. The railway which has been made is expected to revivify this moribund part of the island. Steps are being taken to encourage the growth of cotton, tobacco, and rubber.

The main objects of interest at Anuradhapura may be divided into *Dagobas*, *Monastic Buildings*, and *Pokunas* or *Tanks* (see Fergusson's *Eastern Architecture*, i, 228-243, and Mitton's *Lost Cities of Ceylon*, chaps. iii-ix).

The *Moonstones* of Ceylon have been described as unique: they are not the "milky-blue" jewels of Ceylon, but are semicircular granite stones, placed at the foot of a flight of entrance steps, and wonderfully carved in concentric rings, containing processions of animals and floral scrolls of artistic design. Fine specimens are to be seen at Anuradhapura and Polonnuwara.

The eight *Sacred Places* held by the Buddhist Community at Anuradhapura are—The Bo-Tree, Brazen Palace, Abhayagiriya, Jetawanarama, Lankarama, Miriswetiya, Ruanwelli, Thuparama dagobas—the archaeological authorities not being responsible for their preservation.

I. Dagobas.—A dagoba is a bell-shaped construction erected over some relic of Buddha or a disciple (see p. ci). It is always solid, and is surmounted by a cubical structure called the *ti*, which again is surmounted by a lofty spire. The number of dagobas in Anuradhapura is countless, and they vary in size from the enormous masses of the four great

dagobas to tiny objects barely 2 ft. or 3 ft. in diameter. The four chief dagobas are—

1. The *Ruanwelli Dagoba* was a real dagoba, i.e., relic storehouse, commenced by King Dutthagamani, completed about 90 B.C. Its diameter is 252 ft., but it does not retain its original altitude, having been much injured by the Tamils in different invasions. It is now only 180 ft. in height. The lower part of the structure and the platform on which it stands were cleared about the year 1873, and the various fragments of the so-called four "chapels" facing the cardinal points were put together and restored. This dagoba is being restored by the Buddhists. In 1910 and 1911 a large portion of the restoration work of this dagoba collapsed during the rainy season, but the restoration work is continued as vigorously as ever.

2. The *Abhayagiriya* (Mount of Safety), the largest dagoba of all, was begun by King Mahasena, 275-292 A.D., or 302 A.D. Its diameter is 327 ft., and its height when perfect was about 270 ft. It has now lost a great part of the pinnacle, and its present height is only about 260 ft. It stands on a grand paved platform, eight acres in extent, raised some feet above the surrounding enclosure. The enormous mass of bricks in this structure baffles conception. Sir Emerson Tennent calculates that they are sufficient to construct a town of the size of Ipswich or Coventry, or to build a wall 10 ft. high from London to Edinburgh. The *ti* on the summit having shown symptoms of falling, it and what remained of the stump of the spire above it have been put into a thoroughly safe condition by the Ceylon Government, but the lower part remains untouched. It was erected in the 1st century B.C. The summit can now be easily reached, and commands a magnificent view.

3. The *Jetawanarama*, built in the 4th century A.D., was of about the same dimensions as the *Abhayagiriya*. It has been suggested, with some probability, that the names of these two dagobas have been transposed, possibly from the 12th century. The Buddhist Atamasthama Committee allowed a Buddhist monk to make "improvements" on the dagoba; after he had felled all the trees and done more harm than good, the Archaeological Commissioners took over the ruin in 1910, to save it. Supposing that *Jetawanarama* is the ancient *Abhayagiriya*, its foundation is dated 88 B.C., and its enlargement 113-125 A.D.

4. The *Miriswetiya* was built by King Dutthagamani in the 2nd century B.C., and rebuilt in the reign of Kasyapa V. It is surrounded by monastery ruins on three sides. Though smaller than the *Jetawanarama*, it is remarkable for the unusually fine sculpture of its "chapels," or shrines, of the Dhyani Buddhas. It has been partly restored at the expense of the late King of Siam.

Among the minor dagobas, the *Thuparama* and *Lankarama* (both described by Mitton), the latter surrounded by three and the first by four circles of carved columns, are among the most remarkable and most elegant. These columns are a special feature of Ceylon dagobas.

The ruined *Dalada Maligawa*, or Temple of the Tooth, should not be overlooked. The tooth-relic, about 2 inches in length, and like a man's little finger in thickness and shape, is said to have been brought to Ceylon by a Brahman princess, to have been removed for safety when Tamil raids occurred, and to have had many wanderings until it reached Kandy.

II. The remains of Monastic Buildings are to be found in every direction in the shape of raised

stone platforms, foundations, and stone pillars. The walls themselves between the pillars, being of brick, have disappeared. One of the most remarkable of these remains consists of 1600 stone pillars about 12 ft. high and only a few feet distant from each other, arranged in forty parallel rows. These formed the lowest storey of the famous nine-storeyed "Brazen Palace," or monastery, erected by King Dutthagamani 161 B.C., or 101 B.C., nine storeys high (reduced to seven) as described in the *Mahawansa*. It may have been the nucleus of the *Mahavihara*, or Chief Monastery of the town; the upper storeys were no doubt of wood. The clusters of pillars and of platforms of pavilions in every direction for 10 m. are innumerable. Among the most remarkable is one called the Queen's Palace, the semicircular door-step of which is carved with a double procession of animals and studies of flowers.

III. The *Pokunas* are bathing-tanks, or tanks for the supply of drinking water. They differ from irrigation tanks, in being wholly constructed of masonry or of cement. These, too, are countless, in number, and are to be found everywhere through the jungle. The finest is the double (*Kuttan*) tank in the outer circular road, into which elaborately-carved staircases descend.

But there is one object of interest in Anuradhapura which does not come under these heads, the sacred *Fipal* or *Bo-Tree* (*Ficus religiosa*)—originally brought from *Buddh Gaya* (pp. 51, 83)—and though only a fragment now remains, probably the oldest historical tree existing. It was originally brought by the sister of Mahinda, the Princess *Sanghamitta*, as a branch of the bo-tree under which Buddha sat at *Buddh Gaya*, and planted about 240 B.C. (also dated 288 B.C.). From that time to this

it has been watched over by an uninterrupted succession of guardians. It stands on a small terraced mound, and is surrounded by a number of descendants. The adjacent buildings are all modern, but the entrance to the enclosure possesses a fine semicircular doorstep or "moonstone."

Some fine bronze statues found at Anuradhapura in 1908 are now in the Colombo Museum.

Another object of interest not to be omitted is the **Rock Temple** at Isurumuniya, carved in the solid rock, with a large seated Buddha inside and sculptures in low relief on the terraces.

The large tanks of Nuwara-wewa, Tissawewa, and Basawakulam, the two latter of which are filled from Kalawewa, have restored to the neighbourhood of Anuradhapura some of its former fertility.

Other objects of interest at Anuradhapura and in the neighbourhood are—the English Church, the Peacock Palace, *avihara* W. of Ruanwelli, a *mahapali* or alms Hall, the Selchaitiya dagoba, rock-dwellings (galgē, etc.), the so-called Elephant Stables (with the guard-stone), the King's Palace, the Kuttam (=twin) Pokuna, the Pan-kuliya monastery, Vijayarama, Yantragalas (square stones with holes), Elala's tomb, Vessagiriya monastery (a town in itself), groups of buildings on the Arripu Road, the Kiribat dagoba, the Mullegalla and Puliyankulam monasteries.

8 m. E. of Anuradhapura is **Mihintale** (R.H.) a centre of Buddhist pilgrimage. (A motor-coach from Anuradhapura to Trincomalee passes Mihintale, or a conveyance can be obtained at the Hotel). It is a rocky hill crowned with a large dagoba, and literally covered with the remains of temples and hermitages. Ancient and picturesque stairs of many hundred steps

lead to the summit, whence there is a very fine view over the forest plain, from which the great dagobas of Anuradhapura stand up like the pyramids or natural hills. The centre of attraction at Mihintale is *Mahinda's Bed*, the undoubted cell occupied by Mahinda (son of the great King Asoka) the apostle of Buddhism in Ceylon, in the reign of King Dewanampiya Tissa, and containing the stone couch on which he lay. Beside it is the Ambasthala dagoba, erected on the traditional spot where King Dewanampiya Tissa met the missionary Mahinda. On the summit is the Mahaseya dagoba. An idea prevails that it is difficult of access. This is not so. The view, in itself fine, is rendered more so by the position from which it is obtained between the rocks which overhang the "bed."

Mihintale has various objects to be visited, such as the Alms Hall, the Half-way House, the open-air Lion Bath, the stone boats, Giribandha dagoba, Naga pokuna, Ambasthala dagoba (where the bones of Mahinda, said to have died 259 B.C., are said to lie), the Mahaseya dagoba, Et vehera Kunda, Kaludiya Palace, and the Elephant Calf Hill.

On leaving Anuradhapura, travellers for the North can either go direct by rail to Jaffna and Kankasanturai or by road as below. The road is uninteresting all the way to *Elephant Pass*. The stages are as follows:—

95 m. from Kandy (by direct road through Mihintale) **Madawachchiya** (R.H.) (see p. 679). *

From here a road leads N.W. to (47 m.) **Manaar** (R.H.), passing the *Giant's Tank* and the magnificent masonry dam which diverts the *Aruvi Aru* to fill it. From Madawachchiya a railway, 65 m. long, runs to Talai Manaar, at the N.W. point of that island,

forming the Ceylon connection of the through route with India, *via* Rameswaram and Pamban (p. 594). Passengers are conveyed from Talai Manaar to (25 m.) Dhanuskodi by a steamer of the S.I. Railway. Manaar is a dreary spot, commanded by an old Dutch fort, and only remarkable for the number of the African *Baobabs*, which grow freely there, having probably been imported by Arabs in the Middle Ages.

Due S. of Manaar, and half way between it and Puttalam, is *Marichchukaddi*, the scene of the camp for the last Pearl Fishery in 1905, when the enormous number of 50 millions of oysters was fished, and the Government netted the sum of Rs. 2,626,175—a record. The “Banks” lie mostly in the Gulf of Manaar at a depth of about 7 fathoms. The Pearl Banks of Ceylon have excited the cupidity of the nations of all ages from the Phœnicians onwards. There is a large literature on the subject. The enquirer is referred to the modern monograph on the subject by Mr James Hornell, the marine biologist, who has discovered the true causation of the Orient pearl in the body of the oyster. The Pearl Banks were leased by the Government to a London Company for 20 years at a rental of Rs. 310,000 per annum, but in the year 1912 the Company went into liquidation and the Government resumed possession.

111 m. *Vavuniya-vilankulam* (R.H. *), a small town on the edge of a newly-restored tank.

120 m. *Irampaikkulam* (R.H., now a P.W.D. Bungalow).

126 m. *Puliyankulam* (R.H.). The road branches off here to *Mullaivivu* on N.E. coast.

Mullaivivu is the headquarters of the District.

132 m. *Kanakarayanikulam* (R.H., now an Irrigation Bungalow) to *Mankulam* (R.H.).

139 m. *Mankulam* (R.H., good). From here there is a good metalled road to *Mullaivivu*, on N.E. coast.

142 m. *Panikkankulam* (P.W.D. Bungalow).

154 m. *Iranamadu* (Halting Bungalow).

The scrub gets lower and smaller, and the soil poorer and sandier, as the tedious straight road is followed to

166 m. *Elephant Pass*, so named because here the herds of elephants were in the habit of coming from the mainland through the shallow water to the peninsula of Jaffna, which is now entered by a long causeway crossing the arm of the sea which all but divides the district of Jaffna from the remainder of Ceylon.

The R.H. is the old Dutch fort at the edge of the water—quaint and picturesque.

174 m. *Pallai* (R.H., good). The railway line from here to Jaffna was opened in 1902. The region now attained is totally different from that between Anuradhapura and Elephant Pass. The peninsula of Jaffna is the home of a busy, noisy, and closely-packed population. Every cultivable acre is cultivated, and the garden-culture is of beautiful neatness. Great quantities of tobacco of a very coarse description are grown, most of which is exported to S. India. The fine road passes through a succession of large villages as it proceeds.

187 m. *Chavakachcheri* (R.H. good), a large village surrounded by groves of the palmyra palm, which in this province takes the place occupied by the coconut palm in the South.

201 m. Jaffna or Jaffnapatam (R.H.), a large and flourishing town of 40,000 inhabitants, see of a Roman Catholic bishop, and seat of the Government Agent of the Northern Province.

The old *Dutch Fort*, of considerable size, is in perfect preservation, and is a good specimen of a 17th-century fortification. Within it are the *King's House* (the Governor's residence when he visits Jaffna), an old *Dutch Church* containing curious tombstones, the residences of certain officials, and the prison. On the esplanade between the fort and the city stands a graceful *Clock Tower*, built in 1882. The Dutch expelled the Portuguese from Jaffna, their last station in Ceylon, in 1633. The following interesting excursions may be made from Jaffna :—

1. To the Mission Stations at Oodooville, Batticotta, and Kopay, where thousands of children are educated. American Mission Hospitals at Inuvil and Manippay.

2. To Puttoor, where is a very remarkable well of great depth, which is apparently inexhaustible, and ebbs and flows slightly daily.

3. To Point Pedro, the Northern port of Jaffna.

There are some interesting Hindu temples at Jaffna and in its vicinity.

Jaffna is celebrated for its mangoes, esteemed by some as superior to the far-famed Bombay variety. Grapes are also grown. *Turiles* are caught, and *bêche-de-mer* or *wrepang*, a species of sea slug, is fished for, and exported to China, where it is considered a great delicacy. *Chanks* (the shells of a mollusc) are also fished for and exported to India, where they are highly esteemed. In the little Island of Delft, W. of the Jaffna Peninsula, ponies used to be bred.

The Jaffna Peninsula roads are the best in the island. R.Hs.

are sufficiently furnished; visitors should write to R.H. keepers.

Kankesanturai (R.H. *) (11 m. from Jaffna). The terminus of the Northern Railway and a port of call for the round-the-island steamers (see Route 7). A very pretty seaside village; sea-bathing. By coast road to Kayts, a picturesque port.

ROUTE 9.

KANDY TO TRINCOMALEE (with excursion to Polonnaruwa).

Since the construction of the Northern Railway through Anuradhapura and the practical abandonment of Trincomalee, no horse or bullock coach runs on this road. The traveller must make his own arrangements for transport to Polonnaruwa. To Trincomalee a motor (Rs. 20 per seat 1st class, and Rs. 10 per seat 2nd class) runs (65 m.) from Anuradhapura.

As far as *Dambool* this route is the same as Route 8.

On crossing the bridge over the *Mirisgani Oya*, instead of turning left to Anuradhapura and Jaffna (Route 8), the road proceeds straight on, and passing right the road to Sigiriya (p. 680), continues chiefly through dense but poor forest, varied by one or two villages in the midst of small clearings, to

60 m. (from Kandy) *Habarane* (R.H.). The village, though small, is increasing since the restoration of its tank. There is a picturesque *Buddhist Temple* of considerable antiquity, in which are paintings of better design and execution than are usually found in such places. From the lofty rock by the tank a singular view is obtained over the great sea of forest to the N. and E., out of which rises with startling abruptness the rock pillar of Sigiriya (see Route 8).

From Habarane an extremely interesting excursion may be made to Polonnaruwa¹ (27 m.), one of the ancient and deserted capitals of Ceylon. In the Mahawansa it is called Pulatthi, or Pulastipura: its real name is Toparé from the adjacent Topawewa. The road from Habarane to Polonnaruwa is passable for motor-cars. After passing for about 15 m. through wood so dense that it is seldom the eye can penetrate more than a few yards on either side of the path, **Minneri** is reached. This magnificent tank, built by King Maha Sena in 275 A.D., was restored some years ago by the Ceylon Government. The reservoir is upwards of 20 m. in circumference, and no point in its margin commands a view of its entire expanse. The scenery of this lake is enchanting, and nothing can exceed the beauty both in form and colour of the mountain ranges to the S. Half-way between Minneri and Polonnaruwa is the small lake of Giritella, also a tank restored recently, and highly picturesque. On the bund is a roomy and comfortable R.H. overlooking the lake (charge Rs. 6 or Rs. 7 a day; rooms should be engaged beforehand). The view is very similar to that from Minneri, and is of great beauty.

Polonnaruwa first became a royal residence in 368 A.D., when the lake of *Topawewa* was formed, but it did not take rank as the capital till the middle of the 8th century. The principal ruins, however, are of a later date, being chiefly of the time of Parakrama Bahu, 1164-1197 A.D., or 1153-1186 A.D., the epic hero and principal name at Polonnaruwa: the Mahawansa is full of his prowess. It is now wholly deserted, and the masses of ruin, which are strewn for miles around, have to be sought in the dense jungle. It seems to have been abandoned about the

end of the 13th century. The ancient sites are all in the care of the Government. The following are the principal objects of interest:—

About 1 m. S. of the R.H. is the colossal rock-cut figure, 11 ft. 6 ins. in height, formerly held to be a statue of **Parakrama Bahu I.** Later, it has been regarded as, unmistakably, a rock-hewn portrait of a revered religious teacher from the Indian Continent. A cast of it is to be seen in the Colombo Museum. To the W. lie the ruins of what appears to have been a strong tower, the probably wooden interior of which is wholly gone; and a little farther in the same direction are the royal pavilions and bathing-tank, ornamented by much elegant sculpture.

About 1 m. to the N. is a remarkable group of buildings—the popularly named **Dalada Maligawa**, or tooth-shrine, officially called **Siva Devalé**, No. 1, it is really a Hindu temple of about 1200 A.D., a fine granite building having much elegant ornament of quasi-Hindu design, where the tooth may have received temporary shelter; the **Thuparama**, a large, massive brick temple, of the 12th century, Hindu in design—containing images of Buddha—the front and Eastern roof have fallen, while the inner chamber preserves its vault and a tower; the **Wata Dage** (=circular relic-house), a curious circular edifice, 58 ft. in diameter, on a raised mound, with four carved staircases and a low stone terrace with an ornamental parapet, once 14 ft. high, of unique design; and the **Ata** (or **Hata**) **Dage** (=house of eight relics), a large ruined temple. In the same vicinity are the **Satmahal Prasada**, a tower of seven storeys of diminishing size; the **Nissanka-lata-manda-paya**, called the Floral Altar, and sometimes, perhaps

¹ See Cave, Burrows, and Fergusson's *Indian and Eastern Architecture*, i, 244-9: Mitton, chaps. xii-xviii.

wrongly, regarded as a Buddhist "post and rail" enclosure (see p. cii); and a little farther to the E. the Vishnu Dewale, a very Hindu ornamental structure of design, in good preservation.

1 m. farther N. is the Rankot Dagoba, called also the Ruanwelle-saye, the Place of Golden Dust, built in the 12th century. It is 200 ft. in height, with a diameter of 180 ft. The spire is very perfect, even the statues surrounding the drum being clearly discernible. Near it, but to the N., is the Jetawanarama, a mass of ruins, of which the principal ruin is called *Buddha-sima-prasada*; the "House of the Elder," a temple 170 ft. long, 70 ft. wide, and 70 ft. high, at the end of which is a statue of Buddha once nearly 45 ft. high, now headless. The Kiri (=milk-white) dagoba about 100 ft. high, the chunam coating of which is still very perfect, adjoins this building.

Another 1 m. of jungle has to be traversed to reach the Gal (= Kalugal, or the Black-rock) Vihara, a spot where are a rock-cut figure of Buddha sitting, a colossal statue, 23 ft. high, of Ananda, Buddha's favourite disciple, in a pose of deep sorrow, and a reclining figure of the unconscious Buddha, 46 ft. long, cut out of the solid rock.

1 m. farther N. again is the Demala Maha Seya, containing an upright Buddha, once over 40 ft. high; a very large building, highly ornamented, of which the roof and upper part of the walls have fallen in. The debris was partially cleared away in 1886, when many interesting frescoes were found on the walls, but these have since to a great extent perished from exposure.

The dagobas of Polonnaruwa will not compare with those of Anuradhapura, but the buildings of the temples and other structures are in far better preservation.

A huge red lotus grows in great profusion in the lake, probably the descendant of those cultivated for use in the temples and palaces of the city.

Besides the objects mentioned, the visitor should also see the Lotus Bath (4 m. from the R.H., the Potgul Vehera (=Library Dagoba), Audience Hall, Council Chamber Citadel (probably the Royal Palace), Elephant Pavilion, Kumara Pokuna, the massive Galpota or Stone Book, the Pabula Vehera, Siva Devale, No. 2, Unagala Vehera, some smaller temples.

Varied sport can be obtained from Polonnaruwa under the Government Regulations: there is a close season for certain animals.

76 m. Alutoya (R.H.), in the midst of the thick forest; not a bad station for sportsmen. The country is flat, and the jungle of such uniform character as to become very monotonous. Monkeys are certain to be seen crossing the road in large troops during this portion of the journey.

88½ m. Kantalai (R.H.), on the bund of the great tank of Kantalai, restored by Sir W. Gregory in 1875.

100 m. Tampalakam. Minor road on right leads to paddy-fields irrigated by Kantalai.

109 m. road to Batticaloa; eight ferries to be crossed.

110½ m. Metalled road to Anuradhapura.

113 m. Trincomalee (R.H.) (65 m. from Anuradhapura, from which place a comfortable mail motor coach is run daily by the Railway Department). It is a town with a magnificent natural harbour, on the N.E. coast of the island. It is built on the N. side of the bay, on the neck of a bold peninsula, separating the inner from the outer harbour. The former is about 4 sq. m. in extent,

with very deep water. The place is well laid out, but the houses are poor. Population 9000.

The town was one of the earliest settlements of the Tamil race in Ceylon. They built a great temple on the spot where Fort Frederick now stands. The building was destroyed by the Portuguese when they took the place in 1622, and the materials were employed to build the fort; but the site is still held in great veneration, and every week a Brahman priest, in the presence of a large crowd, throws offerings into the sea from a ledge near the summit of a huge precipice of black rock—a most picturesque scene. A monument on the summit of the rocky eminence bears an inscription in Dutch commemorating the death of a young Dutch lady, who, in 1687, being disappointed in a love affair, committed suicide at the spot. Since the expulsion of the Portuguese, European nations have held the place in the following order: Dutch, 1639 A.D.; French, 1673 A.D.; Dutch, 1674 A.D.; French, 1782 A.D.; Dutch, 1783 A.D.; English, 1795. It was taken by the British fleet after a siege of three weeks, and was formally ceded to Great Britain at the Peace of Amiens in 1802.

About 6 m. out of the town, at a place called Kanhiya, there are some hot springs (see p. 677).

Trincomalee, for many years the headquarters of the East India Squadron, has been entirely abandoned by the Military and almost entirely by the Navy.

The entrance to the Bay is marked out by a fine Lighthouse at Foul Point, and another light is placed further in on Round Island. The Mahaweliganga, the largest river in the Island, taking its rise near Adam's Peak, disembogues here.

Good shooting is to be had in season in the neighbourhood of Trincomalee, which is a port of

call for the round-the-island steamers.

In *Tampalakam Bay*, a few miles to the S.E. of Trincomalee, the *window-pane* oyster (*Placuna placenta*) is found—so called from the use to which the Chinese sometimes put the flat translucent shells. The *Placuna* pearls, valueless as gems, are used by the wealthy classes in India to make lime to chew with "betel."

ROUTE 10.

Sporting Tours.

The attention of sportsmen is called to the work of the Game Preservation Society (headquarters Nuwara Eliya) whose main object is to enforce "the close seasons." The open season for game (including peafowl) is from 1st November to 31st May. Visitors who profit by the work of the Society are invited to contribute to its funds, the meagreness of which restricts its operations.

Such tours as the following, of course, require some degree of preparation. Though there are R.H.s. on the routes indicated, they are but few. They contain probably no furniture save a table and a bench or two, and are quite destitute of supplies. The traveller or sportsman will have to carry his own food, cooking utensils, bedding, and tent; and this will necessitate the employment of numerous porters, whose pace must regulate his own, though, if on horseback, he can get over the ground more rapidly than

they do. If expense is not an object, it would be well to get temporary shelters of bamboo and leaf thatch put up at those places, where there is no R.H., for the tent is but an indifferent protection against either fierce sun or heavy rain, and health may seriously suffer in consequence.

In the *Southern Province* all R.Hs. are well furnished and provided with beds and bed linen, crockery, cooking utensils, etc. Supplies, except fowl, eggs, rice, etc., are not usually found except in the principal R.Hs. Soda-water is usually available. Other Government buildings—e.g., Public Works Department Bungalows—usually contain only a table and two chairs. The stages are generally long, and for the sportsman particularly it is advisable to bring a tent, food, cooking utensils, etc. Bullock-carts can be hired at reasonable rates where there are roads.

1. The Yala Sanctuary. Of course it is not supposed to be likely that any sportsman would make the *whole* of this tour, but it indicates a line of country any part of which would make a good centre for sport. The animals to be found are elephants,¹ bears, leopards, deer, and in some places wild buffaloes; wild peacocks abound in the forests, and the tanks and marshes are full of wild fowl; they also swarm with crocodiles.

Starting from Badulla (R.H. *), by carriage the road to Bibile (R.H.) is described in Route 2.

Here wheel conveyance must be abandoned, and the distance must be counted not by miles but in hours, the hour being calculated on the ordinary pace of a loaded porter.

¹ A licence to shoot an elephant costs for residents Rs.100 and for non-residents Rs.300, a buffalo Rs.20 for residents and Rs.75 for non-residents, and a general game licence Rs.5 and Rs.45 for non-residents per annum.

6 hrs. Milgala. A small village with a little patch of paddy cultivation, situated most picturesquely on a river at the entrance to a wild and narrow pass.

4 hrs. Dambagalla (R.H.). A small village, in the vicinity of which irrigation works have been constructed in modern times.

3 hrs. Medagama (R.H.). In a very pretty jungle country abounding with elephants.

5 hrs. Nakkala (R.H.). There is a picturesque Buddhist temple on the side of a mountain in the neighbourhood.

3 hrs. Buttala (R.H.* good). An oasis of cultivation in the jungle, due to the restoration of its ancient irrigation works. Everywhere through the forests the ruins of ancient systems of irrigation and other vestiges of civilisation are to be found. Excellent snipe-shooting during October to January.

4 hrs. Galge. A mass of bare rocks rising from the jungle. There is no R.H. here, and though some shelter may be obtained in caves, tents or a temporary house would be needed.

3 hrs. Kataragama (R.H.). A famous place of Hindu pilgrimage, to which worshippers were wont to resort from all parts of India, as, indeed, they occasionally still do. The pilgrimage was found to produce such mischievous effects in the spread of disease that the Ceylon Government has for many years endeavoured to check it, and it is now reduced to comparatively small numbers. Still, at the time (the dates vary) of the annual pilgrimage, the temple and its vicinity form a picturesque and interesting sight. The temple

itself is but an insignificant building, and a single gilt-metal tile forms the only relic of the golden roof for which it was once celebrated.

6 hrs. **Palatupane** (see p. 676). In the Southern Province.

4 hrs. **Yala River** (no accommodation). Here begins the District in which wild buffaloes are still found. On the further bank of the Yala River a large tract of country has been "proclaimed" by Government, and is known as the "Yala Sanctuary," in which *no shooting or hunting of any sort* is allowed. The Sanctuary lies between the rivers Yala and Kumbukkan, the other limits being the sea on one side and the boundary of the Province on the other. The area is computed at 150 sq. miles. Good forest scenery on river.

3 hrs. **Uda Potana**. No R.H. About 2 hrs. from Uda Potana the ford crossing the Kumbukkan Aar, the boundary between the Southern and Eastern Provinces is reached, and about $\frac{1}{2}$ hr. farther is **Kumuna** (P.W. Bungalow), near a small village.

6 hrs. **Okanda** (P.W. Bungalow), at the foot of a bare rock rising out of the sea of jungle. Peacocks are to be found in great abundance in the neighbourhood of Okanda.

3 hrs. **Panawa** (P.W. Bungalow).

6 hrs. **Lahugalawewa**. A restored tank, the haunt of many wild-fowl. There is a P.W. Bungalow at the tank. Its accommodation is limited. Many elephants in the neighbourhood.

From this point an excursion of some days may be made through the wild country on the border of Uva and the Eastern Province.

There are hardly any villages, and the only accommodation, not specially provided for, would have to be found in the meagre hospitality of some secluded Buddhist monastery of which a few are scattered through the forests. It is useless to indicate any particular route, as that would certainly be made to depend upon the reports received as to the haunts of wild animals at the time.

It may, however, be assumed that a return to comparative civilisation will be made at **Irrakamam**, a restored tank, where there is an Irrigation Bungalow. In its vicinity are the scanty ruins of what was once an enormous dagoba, and a good road leads hence to **Kalmunai** (R.H. *) on the coast, and thence to (25 m.) **Batticaloa** (see Route 2). The sportsman, however, will probably prefer to proceed through the jungles to **Chadaiyantalawa** and **Ambarai** tanks, both of which are swarming with crocodiles; and from the latter to

6 hrs. the river **Namal Aar**, the boundary of the Eastern Province, on crossing which the traveller finds himself again in Uva.

5 hrs. riding along a good track will bring him back to **Nilgala**, from whence he may either return to **Badulla** the way he came or by 6 hrs. **Medagama** (R.H.) and 4 hrs. **Alupota**, in a lovely position, rejoining the main road to **Badulla** at (2 hrs.) **Passara** (R.H.). (See Route 2.)

The foregoing tour, under the title of "The Park Country and the Batticaloa Tanks," is more fully described in Sir Samuel Baker's *Rifle and Hound in Ceylon*.

2. **The Horton Plains** (see Route 2). Here deer are hunted on foot and knifed; there is also excellent

trout fishing in season. Full particulars may be obtained at *The Hill Club*, or from the Assistant Government Agent at Nuwara Eliya.

3. The Trincomalee District (see Route 9).

4. The Puttalam District (see Route 6).

The Wil Pattu Sanctuary. This

Sanctuary was formed in 1903 on the lines of that of Yala. Its area is 150 sq. m., and its limits are well defined, the eastern boundary being the sea-coast at Portugal Bay.

5. The Hambantota District (some parts of this District are referred to in Route 1).

6. Minneri and Polonnaruwa (Route 9).

APPENDIX A. PRINCIPAL KINGS.

(From Mitton's *Lost Cities of Ceylon*, p. xvi.)

	TURNOUR.	WICKREMASINGHE.
Wijaya	543 B.C.	483 B.C.
Pandukabhaya	437 "	377 "
Dewanampia Tissa	307 "	247 "
Uttiya	267 "	207 "
Elala	205 "	145 "
Dutugemunu (Dutthagamani)	161 "	101 "
Lajji Tissa	119 "	59 "
Walagambahu	104 and 88 B.C.	43 and 28 B.C.
Bhatikabhaya	19 B.C. to 9 A.D.	42 A.D.
Gaja Bahu I.	113 A.D.	177 "
Kanittha Tissa	229-247 "
Maha Sena	275 A.D. to 292 or 302 A.D.	308 "
Mahanama	412-434 A.D.	...

Here ends the Mahawansa: the rest of the kings belong to the Suluwansa.

	TURNOUR.	WICKREMASINGHE.
Mitta Sena	433 A.D.	...
Dhatu Sena	459 A.D.	495 A.D.
Kasyapa I.	477 "	511 "

From this point the dates in the first column are from Wijesinha; the second, as before, from Wickremasinghe, whose figures in all cases are provisional.

	WIJESINHA.	WICKREMASINGHE.
Aggabodhi I.	564 A.D.	629 A.D.
Aggabodhi III.	623 "	655 "
Aggabodhi IV.	674 "	704 "
Aggabodhi VI.	741 "	792 "
Mahinda II.	787 "	838 "
Sena I.	846 "	897 "
Sena II.	866 "	899 "
Udaya I.	901 "	952 "
Kasyapa IV.	912 "	963 "
Kasyapa V.	929 to 939 A.D.	980 "
Sena IV.	c. 972 A.D.	c. 1023 "
Mahinda IV.	975 "	1008 "
Mahinda V.	1001 "	1018 "
Wijaya Bahu I.	1065 "	1038 "
Wikrama Bahu	1121 "	1110 "
Gaja Bahu II.	1142 "	1131 "
Parakrama Bahu I.	1164 "	1153 "
Wijaya Bahu II.	1197 "	1186 "
Nissanka Malla	1198 "	1187 "
Bhuwaneka Bahu	1277 "	...
Parakrama Bahu III.	1288 "	1288 "
Wimala Dharama (first King of Kandy)	1592 "	...
Sri Wickrema Raja Singha (last King of Kandy)	1798 A.D. Deposed 1815 A.D.	..

APPENDIX B.

TABLE OF DISTANCES.

(From Mitton's *Lost Cities of Ceylon*, p. 253.)

ANURADHAPURA	MILES.	KANDY	MILES.
to Dambulla . . .	44	to Anuradhapura . .	89
„ Kandy . . .	89	„ Dambulla . . .	45
„ Kurunegala . . .	71	„ Habarane . . .	59
„ Polonnaruwa (by		„ Matalé . . .	16
direct road) . . .	65	„ Polonnaruwa . . .	87
(by Dambulla) . . .	80	„ Sigiriya . . .	55
„ Sigiriya . . .	52		
„ Yapahuwa . . .	45		
		MATALÉ	
COLOMBO		to Anuradhapura . .	73
to Anuradhapura (by		„ Dambulla . . .	29
Kurunegala) . . .	129	„ Habarane . . .	43
(by Kegalle and		„ Kandy . . .	16
Kandy) . . .	161	„ Polonnaruwa . . .	71
„ Kandy . . .	72	„ Sigiriya . . .	39
„ Kurunegala . . .	58		
„ Polgahawela . . .	45	POLONNARUWA	
		to Anuradhapura (by	
DAMBULLA		direct road) . . .	65
to Anuradhapura . .	44	(by Dambulla) . . .	80
„ Kandy . . .	45	„ Dambulla . . .	42
„ Habarane . . .	14	„ Habarane . . .	28
„ Polonnaruwa . . .	42	„ Kandy . . .	87
„ Sigiriya . . .	10	„ Sigiriya . . .	43
HABARANE		SIGIRIYA	
to Anuradhapura . .	37	to Anuradhapura . .	52
„ Dambulla . . .	14	„ Dambulla . . .	10
„ Kandy . . .	59	„ Habarane . . .	15
„ Polonnaruwa . . .	28	„ Kandy . . .	55
„ Sigiriya . . .	15	„ main road . . .	6
		„ Polonnaruwa . . .	43

NOTE.—These distances are in many cases taken from the Motor-tour
Prospectus of Messrs Walker, Sons & Co. Ltd., Ceylon.

INDEX AND DIRECTORY FOR 1918

(Reference to persons are given in small capital type.)

Mr MURRAY will feel greatly obliged to travellers who are kind enough to send him notes of any mistakes or omissions that they may notice in this Directory, giving at the same time a permanent address to refer to in case of necessity.

(R.) = Refreshment Room; D.B. = Dak or Travellers' Bungalow;

R.H. = Rest House; H. = Hotel.

A

ABBOTTABAD, D.B., 334, 342, 349, 350.

ABUL FAZL, 144, 153, 241, 244, 248.

ABU MOUNT, 181.

ABU ROAD (R.), 181.

D.B. close to rly. sta. Conveyances to Mr. Abu (17 m.): motor-car (6 seats), 34 rs.; 6 rs. per seat; mail motor lorry, 1 1st cl. seat, 6 rs.; 8 2nd cl. seats, 3 rs. 8 as. per seat; 8 3rd cl. seats, 2 rs. per seat; bullock shigram, 4 seats, 1 r. per seat; rickshaw, 5 rs.

ACHIBAL, 346.

ACHILGHAR, 183.

ACHNERA (R.), 219.

ADAM'S PEAK, 663, 669.

ADAMWAHAN BRIDGE, 357.

ADEN, liv.

ADILABAD, 282.

ADONI, D.B., 476.

ADRA, 122.

AFRIDIS, 339-340.

AGRA (R.), 158, 200, 219, 229. Railway from Bombay, Routes 9, 12, and 13; from Delhi and Allahabad. Route 22.

Hotels: Cecil H. (Mrs Hotz), excellent, from 8 rs. upwards; Laurie's H., well spoken of; Metropole H., Carlton H., Empress H., all about 1 m. from Fort rly. sta., and about 1½ m. from Cantonment rly. sta.

Banks: Bank of Bengal; Alliance Bank of Simla.

Churches: St George's, St Patrick's, Havelock

Chapel, Cantonment, St Paul's, Civil Lines, St Mathias's, Agra Fort, R.C. Cathedral in Civil Lines.

Club: Agra C., near Post Office.

Missions: C.M.S., St John's College, Baptist Mission, Methodist Mission.

Hospitals: Thomason, for men, includes Eye Hospital of 80 beds; Dufferin, includes Maternity and Lady Lyall Hospitals; Hewitt, Hospital for infectious diseases; Medical School.

Shops: Shawl Merchants, Gold and Silver Embroidery, Ganeshi Lal & Sons, Drummond Rd., Gulab Chand & Lakhmi Chand, Chuttan Lal, Kinari Bazar; Agra Marble Works, Drummond Road; Miniature Painter, Badri Pershad; Photographers, Priya Lal, Raina, Dorab; Carpet Factory, Otto Weylandt, Strand Road, opposite Itimad ud daula; Motors, Pestonji, Cantonments; and Nathu Mal Mahadeo, Belanganj.

Hackney Carriages: Class I. II.

By distance—Per mile . . . 8 as. 6 as.

By time—Day of 9 hrs. 4 rs. 3 rs. Half-day, 5 hrs. 2½ rs. 2 rs. 2 hrs. . . . 1½ rs. 1 r. 1 hr. . . . 12 as. 10 as.

AHALYA BAI, 33, 35, 66, 69, 123-124, 215, 484.

AHMAD SHAH DURANI, lxiii, lxiv, 251, 262, 284, 299, 308, 309, 403.

AHMADABAD (R.), 171, 200.

Hotels: Grand H., 7 rs.; near Christ Church, about 1½ m. from rly. sta.; Bed-rooms, noisy, attached to the rly. sta. Refreshment Rooms.

Bank: Bank of Bombay, in the Bhadar Compound, near the Collector's Office.

Churches: Christ C., close to the Grand H.; also Church in the Cantonment, 2 m. outside the city.

Mission: Irish Presbyterian Mission, R.C. Church.

Hackney Carriages

Class I. II.
1st hr. . . . 1 r. 12 as.
Each subs. hr. 12 as. 6 as.
Day 8 rs. 4½ rs.
To city or
camp 1 r. 12 as.
Motors: 8 as. per m., 5 rs. per hr.

AHMADNAGAR (R.), D.B. (very inferior), 473: no hotel. Good tongas available at rly. sta., where there is a small R. and waiting-room.

Club, good.
Golf Club.
Mission: S.P.G.

AIHOLI, 502.

AITCHISON, SIR C.U., 309.

AJAIGARH FORT, 161.

AJANTA, 36, 56.

AJMER (R.), 134, 189. Sleeping Rooms at the rly. sta. excellent. D.B. Railway H., mediocre. Church: near the rly. sta.

Club: Kaisarbagh.
Mission: Medical of U.F. Church of Scotland.

Bank: *Alliance Bank of Simla.*

Hackney Carriages:

By time—

	Class I.	II.
Day of 9 hrs.	5 rs.	3 rs.
Half-day . .	3 rs.	2 rs.
1 hr.	1½ rs.	12 as.

AJODHYA, 376.

AKBAE, EMPEROR, lxiv, lxxv, 41, 43, 62, 74, 96, 119, 125, 127, 129, 144, 148, 163, 170, 184, 189, 190, 191, 220, 225, 228, 229, 233, 237, 238, 241, 242, 243, 244, 247, 248, 251, 274, 280, 284, 297, 312, 313, 324, 325, 335, 339, 341, 344, 358, 377, 379, 415, 430, 473.

AKMEEMANA, 673.

AKOLA, 113.

AKYAB, D.B., 644. There are no hotels, but at the D.B. meals are provided by a khansama.

Clubs: *Akyab Gymkhana Club, Race Course Road, The Volunteers' Club, Main Road, and The Telegraph Club, Phayre Street.*

General Stores: *Jacob & Co., Ezekiel & Co.*

European Shops: *Messrs Rowe & Co., Messrs Whiteaway, Laidlaw & Co.*

ALAUDDIN, EMPEROR, lxiv, lxxv, 61, 102, 103, 127, 129, 170, 181, 251, 273, 275, 277, 279, 280, 281, 414.

ALBUQUERQUE, AFONSO D', 2, 490, 567, 569.

ALEXANDER THE GREAT, lxxxvi, 326, 355, 366.

ALGIERS, xliii.

ALIABAD SARAI, 348, 349.

ALIGARH, 200, 403.

D.B. Kellner's Refreshment and Sleeping Rooms.

Missions: *American Methodist Episcopal, R.C., and C.M.S. Church.*

ALI MASJID, 339.

ALIPUR, 87.

ALI WAL, 298.

ALLAHABAD (R.), 41, 414.

Railways: From Bombay and to Calcutta, Route 2; from Delhi and Agra, Route 22; to Benares, Route 2; to Lucknow, Route 22.

Hotels: *Kellner's Rooms, the Central Hotel; South Road, 5 rs. a day; Grand H., Canning Road, 7 rs. a day.*

Club: *Allahabad Club.*

Banks: *Bengal, Allahabad.*

Shops: *Jewellers, Betchler, Janson and Scowen, Chemists, Buncombe, Robbie; Photographers, Dagg (winter season only); Mistry (Canning Road); Drapers, Hathaway; Trevellon & Clarke; Stationer, Liddell; General Merchants, Shaporji, Guzder, Ghandi.*

Churches: *Cathedral, R.C. Cathedral; Holy Trinity.*

Missions: *C.M.S., St Paul's Church; Divinity College; The Baptist, Presbyterian, American Methodist Episcopal, and Zenana.*

Motors: *Repairs at Motishaw's, and Morrison & Crook; petrol at Wheeler's, Motishaw's, Morrison & Crook's, and Guzder's.*

Newspapers: *The Pioneer, a daily paper, one of the most important in India; The Pioneer Mail, for readers in Europe; The Leader.*

Tailor: *Hathaway.*

Booksellers: *Wheeler & Co., Northern India Tract and Book Society.*

Hackney Carriages:

By time—

	Class I.	II.
1st hr.	1 r.	12 as.
Subs. hr. . . .	8 as.	6 as.
½ day	2½ rs.	2 rs.
Day, 4 rs. 8 as.	3 rs.	8 as.

By distance—

(By agreement). 8 as. per m.

ALLBLESS, BOMANJEE E., 15.

ALMORA, 384, 385.

D.B., but no hotels.

ALTAMSH, EMPEROR, lxiv, lxxv, 148, 154, 190, 224, 248, 252, 265, 277, 279, 280, 281, 416.

ALUTNUWARA, 663, 666.

ALUTOYA, R.H. small, well situated for sportsmen, 688.

ALWAR (Ulwar), 198.

D.B. close to rly. sta. Application should be made beforehand to the Senior Member of Council for the use of a carriage, which is

kindly put at the disposal of visitors (there is a small charge); also for permission to visit the Palace, Library, Treasury, and Armoury.

Mission: *U.F. Ch. of Scotland.*

AMALNER, 165.

AMARAPURA, 630.

AMARAVATI, 459.

AMARKANTAK, 119.

AMARNATH CAVE, 347.

AMBALA (R.), D.B., 287, 296.

Hotels: *Parry's H., Lumley's H. near the rly. sta.; Robson's H.*

Agents: *R. Norton & Co. undertake the clearing and forwarding of goods between Ambala, Kasauli, Sabathu, etc.*

Club: *Sirhind C.*

Banks: *Alliance Bank of Simla; Bank of Upper India.*

Mission: *American Presbyterian.*

Chemist: *Spratt.*

General Merchant, Norton.

Tailor: *Counts.*

Hackney Carriages:

Class I. II.

Per day . . . 4 rs. 3 rs.

1st hr. 1 r. 12 as.

subs. hr. 8 as. 6 as.

AMBALANGODA, R.H. good; good bathing-place, 672.

AMBALANTOTA, R.H. good, 675.

AMBARNATH, 460.

AMBEPUSSA, R.H. ½ m. from rly. sta., 658.

AMBER (R.), 192, 196, 197; Restaurant, fairly good.

AMGAON, 118.

AMHERST, LORD, 290.

AMINGAON, 442.

AMIR KHUSRU, POET, 274, 277.

AMMAYANAYAKANUR, 589.

D.B. comfortable, close to rly. sta., convenient for travellers to and from Kodai-kanal, Palmy Hills.

AMPTHILL, LORD, 550.

AMRAOTI, 113.

Waiting Rooms. Good D.B.

AMRITSAR (R.), 299.

Hotels: *The Cambridge, The Amritsar, The Civil and Military.* The last is the old D.B., given over to the hotel proprietor for management. Amritsar can be conveniently visited from Lahore.

Banks: *National Bank of India; Alliance Bank of Simla; Chartered Bank of India, Australia, and China; Panjab National; Allahabad Bank; Panjab and Sind Bank.*

Carpet Factories: Devi Sahai Chamba Mal; Joseph Wittmann; T. C. Maller; K. B. Ghulam Hussain.

Dealers in Oriental Goods: Devi Sahai Chamba Mal; Bokhara House (Din Gul, Proprietor); Radha Kishen; Lachhman Das; Karm Chand; Tajuddin.

AMTA, 100.**ANAGUNDI, 517, 519.****ANAKAPALLI, 457.****ANAND, 170.****ANANTAPUR, 522.****ANDHER, 143.****ANGEDIVA, 489.****ANKLESWAR, 165.****ANNANDALE, 289, 290.****ANSON, GENERAL, 253.****ANURADHAPURA (R.), 589, 658, 677, 679, 681.**

Hotel good; 8 rs. a day, inclusive, fixed by Government.

The rates and fares for carriages, hackeries, spring carts and jinrickshas are chargeable according to a scale specified in detail in Schedule B. of By-law, No. 27 (of the Vehicles Ordinance, No. 9 of 1901), as amended by Proclamation, dated 17th November 1916.

AONG, 410.**APPA SAHIB, 115, 483.****ARAVALLI HILLS, 181.****ARCOOT, 537-540.****ARKONAM (R.), 478, 540, 559.**

Excellent sleeping accommodation at rly. sta.

ARORE, 359.**ARRAH, D.B., 47.****ARSIKERE (R.), 527.****ASAF JAH, 102, 103.****ASAF KHAN, 178, 232, 241, 321.****ASANSOL (R.), 47, 54, 122, 442.***Asiatic Researches, 84.***ASIRGARH HILL-FORT, 37.**

ASOKA, EMPEROR, lxxvi, cxlii, 43, 48, 51, 56, 64, 73, 127, 138, 139, 140, 207, 209, 211, 270, 377, 450.

ASOKA'S PILLARS, 43, 64, 72, 74, 270.

ASOKA'S ROCK INSCRIPTIONS, 40, 43, 53, 83, 84, 209, 271, 336, 445, 450.

ASSAM VALLEY, 434, 440.

Mail Communication with Calcutta by Chandpur and by Parbatipur.
See pp. 438, 441.

ASSAYE, 112.**ATGAON, 29, 31.****ATTOCK, R.H., 335-336.****AUCKLAND, LORD, 80, 82, 289, 353.****AUNGIER, 2, 5, 9, 164.****AURANGABAD, D.B. good, but small, 110.**

AURANGZEB, EMPEROR, lxiv, lxxv, lxxvi, lxxviii, 31, 68, 69, 71, 76, 102, 103, 110, 111, 127, 135, 152, 156, 164, 184, 192, 214, 218, 222, 224, 227, 228, 230, 234, 237, 240, 261, 263, 264, 269, 274, 280, 292, 297, 308, 315, 319, 322, 337, 355, 362, 403, 436, 475, 476, 482, 484, 491, 497, 498, 509, 511, 520, 535.

AVA, 630.**AVANTIPUR, 346.****AVISAWELLA, R.H. excellent, 657, 669.****AWATKOOLA, 344.****AYODHYA, 180.****AZAMGARH, 421.****AZIMGANJ, 414.****AZIM, PRINCE, 76, 102, 157, 192, 436, 482-3.****B**

BABAR, EMPEROR, lxiv, lxxv, 148, 153, 224, 242, 243, 248, 284, 337.

BADAMI, 500.

Rly. R.H. Permission to occupy granted by District Traffic Superintendent, S. Madras Rly. Bijapur.

BADARPUR, 283, 438.**BADLI-KI-SARAI, 254, 269, 283.****BADNERA (R. Waiting and Refreshment Rooms), D.B., 113.****BADULLA, R.H. good, 666, 690.****Bank: Bank of Ura.****BAGALKOT, 500.****BAGDEHI, 120.****BAHADURPUR, 149.****BAHADUR SHAH (TWO EMPERORS), 157, 252, 273, 281.****BAHADUR SHAH OF GUJARAT, 125, 127, 129.****BAHAWALPUR, D.B., 357.****BAHMANI DYNASTY, 474-5, 476, 505.****BAHRAICH, 375.****BAHURIBAND, 40.****BAIDYANATH, 53.****BAILLIE GUARD, 389, 390.****BAIZA BAI OF INDORE, xci, 68, 69.****BAJAURA, 292, 306.****BAJI RAO I., 70, 145.****BAJI RAO II., 10, 31, 70, 407, 465, 470, 471, 472, 474.****BAKHTAWAR SINGH, 199.****BAKHTIYAR KHAN, 53.****BAKER, SIR E. N., 79.****BALAJI BAJI RAO, 35, 467, 471.****BALANGODA, R.H., 670.****BALASORE, D.B., 96, 443.****BALBAN EMPEROR, 280, 403, 416.****BALIPITHAM, 599-600.****BALLYGUNGE (BALLIGANJ), 86.****BALRAMPUR, 375.****BALSAR, 162.****BALTAL, 347.****BALUGAN, 455.****BANAVAR, 525.****BANDA (R.), D.B., 161.****BANDARAWELLA, 666, 671.**

Hotel excellent, conducted as an hotel. Coach to Badulla, 18 m.

BANDEL, 55, 98.**BANDIKUI (R.), 198, 219.****BANDRA, 25.**

BANGALORE (R. at City Sta. Tea and Coffee Room at Cantonment Sta.), 523, 527. Railway from Bombay and Poona, Routes 26 and 31; from Madras Route 32 (6).

Hotels: *The West End H., Cubbon H.* (accommodation at these 2 hotels is above the average), from 6 rs.; *St Mark's Hotel.*

Missions: *London; Wesleyan Methodist; Methodist Episcopal; R.C. Cathedral.*

Banks: *Bank of Madras, The Mysore Bank, Bangalore.*

Chemists: Forster, Captain & Co., The Cash Pharmacy.

Jewellers: Barton & Son, Marlam & Co.

Motors: Motor House. **Bookseller:** Higginbotham.

Photographers: Barton & Son.

Club: *United Service C., Residency Road.*

Hackney Carriages: By time—

Class I. II.
1st hr. . . . 1 r. 12 as.
Each subs. hr. 6 as. 4 as.

By distance—
Class I. II.

3 m. . . . 1 r. 12 as.
Each subs. m. 4 as. 3 as.

BANKIPORE (B.), 48.
D.B. good, near rly. sta.
Bank: *Bank of Bengal.*
Churches: *St. Mark's and St. Thomas's.*

BANNU, 331.
BANYAN TREES, 43-44, 93-94, 111, 167, 228, 479-480, 486, 550, 594.

BAPATLA, 460.

BARA, D.B., 340.

BARABANKI, 375.

BARABAR CAVES, 50.

BARAKAO, 330.

BARAKAR, 54.

BARAMGALLA, D.B., 348.

BARAMULA, 343.
D.B., good.

BARAN, 143.

BARAUNI, 419.

BAREHTA, 157.

BAREILLY, D.B., 373, 383.

Refreshment Rooms at the rly. sta. with sleeping-rooms.

Club: *Bareilly C.*
Hotel: *Station, Coronation, Civil and Military, Cantonment D.B. (The last is the best.)*

Banks: *Upper India, Allahabad,*

BARGAON, 40.

BARNARD, GENERAL SIR H., 254, 255, 269.

BARODA, 168.

Good Refreshment and Waiting Rooms.

D.B. in camp. $\frac{1}{2}$ m. from rly. sta.

Baroda Hotel: $\frac{1}{2}$ m. to W. of railway station: well situated, fair.

Churches: **ANGLICAN,** consecrated by Bp. Heber, 1824; restored 1838. There are also **R.C.** and **Methodist Churches.**

BARRACKPORE, 94, 95.

BARSI ROAD (R.), R.H., 473.

BARWARI, 269.

BARWA-SAGAR, D.B., 144, 158.

RASAVA, 525.

BASSEIN (Bombay), clx, 2, 3, 5.

BASSEIN (Burma), 643, 645.

BASSEIN ROAD, 28.

Waiting Room at rly. station.

District Bungalow (not furnished for travellers, and no messman) near ruins. Conveyances at the station.

BATALA, 303.

BATTICALOA, R.H. good, 667, 688, 691.

BATTULU OYA, 677.

BATWA, 178.

BAWAN, 346.

BEAWAR, D.B., 189.

BEDSA CAVES, 465.

BEGAMPET, 514.

BEGAMPUR (Delhi), 252, 275, 320.

BELGAUM (R.), 485.

D.B. near the Fort, $\frac{1}{2}$ m. from sta. Hotel near sta.

Missions: *Methodist Episcopal; R.C. Church.*

Public Conveyances: drawn by bullocks, and a few motor-cars.

BELIHULOYA, R.H. good, 670.

BELLARY (R.), D.B., Railway Refreshment and Retiring Rooms: no Hotel, 519.

London Missionary Society.

BELLS, 617, 630-631, 640.

BELPAHAR, 120.

BELUR, R.H., 525, 526.

BENARES. Railway from Bombay and Calcutta, Route 2; from Lucknow,

20 (a); from Allahabad, 2. D.B., 46, 60, 71, 379.

Hotels: *Clarke's H., H. de Paris, 8 rs., both good, and under European management generally.*

Bank: *Bank of Bengal.*

Missions: *C.M.S. (at Sagra), St Mary's is the Cantonment Church, London Mission, Wesleyan, Baptist, Zenana, R.C. Church.*

Hackney Carriages: available at the rly. sta. and hotels.

Landaus—2 rs. for 1st hr. 1 r. for each subsequent hr.

Phaetons—1 r. 8 as. for 1st hr., 12 as. for each subsequent hr. To Sarnath and back, 5 rs.

Lacode Embroidery and Silk Manufacturers,

Girdhar Das Hari Das is the best firm, but there are others. Brass is best found in the Brass Bazar.

BENARES, MAHARAJA OF, 63, 65, 71.

BENGAL COAL, 55.

RENTINCK, LORD WM., clxi, 80, 298, 548, 549.

BENTOTA, R.H., very good, 672.

BERAR, 113, 114.

BERARLI, 349.

BERHAMPORE, (Bengal), D.B., 423.

BERHAMPUR (Ganjam), 456.

BERNIER, 222, 261, 266, 345.

BESNAGAR, 143.

BET, 216.

BETTIH, D.B., 420.

BETUL, 38.

BEYPORE, 568.

BEZWADA (R.)
D.B., 458, 459, 516, 522.

BHABUA, 53.

BHAGALPUR, D.B., 419.

BHAGWANPUR, 53.

BHAJA CAVES, 462, 465.

BHAMBOR, 363.

BHAMO, 632.

Express steamboats from Mandalay every Wednesday, due at Bharno Friday.

Return from Bharno every Saturday. Ferry-boats also run daily to and from Katha in connection with the rly.

BHANDARA ROAD, D.B., 116.

BHANDUP, 30.

BHANGIR, 515.

BHARATPUR, 218.

D.B. outside the Muttra Gate.

BHARHUT Stupa, 41.

BHATINDA, 187, 352.

BHAUNAGAR, 205, 468.

D.B. Horse and bullock shigrams to be had.

BHAYANDAR, 28.

BHILSA, 136.

BHIMBAR, D.B., 342, 347, 348.

BHIM TAL, 384.

BHITA, 44.

BHIWANI, R.H., 351.

BHOJEEPURA, 383.

BHOJPUR, 143.

BEOPAL (R.), 135.

D.B. near rly. sta.

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BEOR GHAT, 30, 461.

BEUBANESWAR, xcix, 203, 445, 448.

BHUJ, 201.

BHUSAWAL (R.), 36, 113.

BHUTIA BASTI, 429.

BIANA, 170, 248.

BIBILE, R.H., 667, 690.

BIDAR, 505.

BIDERRA, 98.

BIJAPUR (R.), 475, 490-500.

D.B., with arrangements for food, in the town. Tongas are to be had at the rly. sta. Fares whole day, 2 rs.; from station to any residence, 8 as.

BIJNOR (D.B., accommodation tolerable), 372.

BIKANER, D.B., 187.

BIKANER, SIR GANGA SINGH, MAHARAJA OF, 187.

BIKRAMPUR, 39.

BILAHRI, 40.

BILASPUR (R.), 119.

BILESWAR, 216.

BIMLAPATAM, 457.

BINA (R.), 143.

BINDUSARA, 48.

BIRBAL, RAJA, 246.

BIR SINGH DEO, 144, 148, 158.

BIRUR, 523.

BITHUR, 406, 407.

BITRAGUNTA, 460.

BLACK HOLE, THE, 76, 90.

BLACK PAGODA, 454.

BOBBILI, 457.

BOLAN PASS, 368-369.

BOLARUM, 514, 515.

BOMBAY, xix, 1-22; see Special Index, p. 1.

Railways: To Calcutta by G.I.P. and E.I. Rylys. Routes 2 and 7; to Poona, Madras, and Bangalore, by G.I.P. and Madras Rylys., Routes 26 and 32; to Ahmadabad by B.B. and C.L. Rylys., Route 10; to Allahabad, Route 2; to Agra, Routes 9 and 12 (a); to Delhi, Routes 10 (r) and 12 (c).

Hotels: *Taj Mahal Palace H.* (Tata's), near the Apollo Bandar, one of the best in India; *Watson's Esplanade H.*, close to Secretariat; *H. Majestic*, near Apollo Bandar. *Matchanis Carlton H.* (residential), near Hornby Road; *Great Western H.* in Apollo Street; *Apollo H.*

Restaurants: *Victoria Station Restaurant*; *The Apollo*, Apollo Bandar; *Majestic*; *Green's* (near Yacht Club and Taj Mahal Hotel), *Cornaglia*, late *Pelitti* (confectioner), 83 Meadow St.

Agents: *Messrs King, King & Co.*, King's Building, Hornby Road (branch of *Henry S. King & Co.*, 65 Cornhill); *Grindlay, Groom & Co.*, Hornby Road; *Latham & Co.*, Apollo Street. *Cox & Co.* These firms undertake all business in connection with travelling and financial arrangements, forwarding of goods, engaging of Indian servants, etc., in India.

Thos. Cook & Son, Esplanade Road, supply all kinds of information about excursions and tours in India, and provide circular tickets, etc.

Bands: On certain days of the week at the *Yacht Club* and on the *Esplanade*, a favourite promenade; also at *Victoria Gardens*, Byculla.

Bankers: *Bank of Bombay*, *Bank of Bengal*, and *Chartered Bank of India*,

Elphinstone Circle; *Hong-kong and Shanghai Bank*, 40 Church Gate Street; *National Bank of India*, Rampart Row; *Mercantile Bank of India*, Esplanade Road; *Bank of Australia and China*, Esplanade Road; *Comptoir National d'Escompte*, Esplanade Road.

Baths: Salt-water *Swimming Baths on Back Bay*, and at *Beach Candy*.

Booksellers: *Thacker & Co., Ltd.*, Esplanade Rd.; *A. J. Combridge & Co.*, Hummam Street.

Chemists: *Kemp & Co.*, corner of Church Gate St. and Elphinstone Circle; *Treacher & Co.*, Esplanade Road; *Phillips & Co.*, Esplanade Road.

Churches, etc., see Special Index, p. 1.

Clubs: *Byculla Club*, Bellasis Road, Byculla, with sleeping accommodation attached.

Bombay Club, 26 Esplanade.

Yacht Club, on the Apollo Bandar, overlooking the bay. Subscriptions for Strangers admitted as members, 16 rs. a month. Ladies are admitted when accompanied by a member or hon. member.

The Bombay Gymkhana and Golf Club, Queen's Road. *Commercial Gymkhana*, *Japanese Gymkhana*, Back Bay.

Ladies' Gymkhana, The Ridge, Malabar Hill, with lawn-tennis and badminton grounds. A favourite resort in the evenings. *Princess Mary (ladies') Gymkhana*, Back Bay.

Consuls: *France*, M. Charles Barret, Roosevelt House, Apollo Bandar.

Italy, Sr. Giovanni Gorio, Marsaban Row.

U.S.A., —

There are representatives of most other nations, including Japan and Persia.

Conveyances: Carriages with a single horse, 5 rs.

a day, with 2 horses, 10 rs. There are plenty of victorias in the streets to be hired by the trip or for the hour at very moderate fixed fares—only 8 as. inside the Fort limits.

Taxis: Inside 5 m. radius, First mile, 8 as. and 6 as.; each subsequent $\frac{1}{2}$ m., 2 as.; halts, 1 anna for every 2 and 3 minutes; 1 r. 14 as. per hour.

Motors: For morning, 15 rs.; for afternoon, 20 rs.; for afternoon and evening, 25 rs.; for day of 12 hrs., 60 rs.

Dentists: *Campbell and Barr*, Esplanade Road. *Dr Gheesta*.

General Stores: *Treacher & Co.*, *Army and Navy Stores*, *Phillips & Co.*, all on the Esplanade.

Hairdressers: *Fucile*, under Bombay Club.

Hospitals: See Special Index, p. 1.

House Agent: *E. Flower*, Hummam St.

Libraries: *Asiatic Society Library* in the Town Hall; the *Sassoon Institute*, Esplanade, adjoining *Watson's Hotel* (strangers can join the lending library for a week).

Markets: *Crawford*, for fruit, vegetables, flowers, poultry, meat, etc. *Nal*, in Sandhurst Road.

Cloth, in Indian Quarter, Shaikh Memon Street.

Copper, close to Mombadevi Tank, Indian Quarter. *Cotton market*, Colaba.

Medical Men: *Dr Sidney Smith*, Mazagon Road, *Dr Dinmook*, *Dr Child*, *Dr Barry*.

Milliners, Dressmakers, etc., *Laidlaw & White-way*, Esplanade; *Badham & Co.*

Missions, etc., see p. 21.

Newspapers: There are two leading English papers in Bombay, the *Times of India* and the *Bombay Gazette*, besides a number of Indian papers. The *Advocate of India* is an English evening paper.

Nurses: The "All Saints" Sisters; see p. 21.

Oculist: *Major Macpherson*.

Opticians: *Lawrence & Mayo*; *Marcks & Co.*—both in Esplanade Road.

Outfitters: *Badham & Pile, Limited*; *Asquith & Co.*; *Laidlaw & White-way*; *Hoar & Co.*—all in Esplanade Road.

Photographers: *Raja Dindiyal Bourne & Shepherd*, 18 Esplanade Road; *Fernon*, Esplanade Road.

Stables: *The Arab*, in Byculla; see p. 17.

Steamship Agencies: *P. & O. S.S. Co.*, 19 Rampart Row. Steamers every week to Aden, Ismailia, Port Said, Brindisi, Marseilles, Gibraltar, Plymouth, and London; and every fortnight to Malta, Colombo, Madras, Calcutta, Straits Settlements, China, Japan, and Australia.

British India S.N. Co., Mackinnon, Mackenzie & Co., Ballard Road, for Calcutta, and coast ports, Karachi, Persian Gulf, Burma, and E. Coast of Africa.

Hall and Ellerman's City Lines, Killick Nixon, Home Street.

Messageries Maritimes, Albert Buildings, Hornby Road.

Societa Nazionale di Servizi Marittimi (Rubattino), Elphinstone Circle.

Wilson Line of Steamers, Finlay, Muir & Co., Esplanade. To Karachi, Middlesbro' or Hull every fortnight.

Anchor Line of Steamers, W. & A. Graham & Co., Graham's Buildings.

Bombay Steam Navigation Co. (Shepherd & Co.), Frere Road—for neighbourhood of Bombay, Ratnagiri, Goa, Mangalore.

Nippon Yusen Kaisha, to China and Japan, Hornby Road.

Theatres: The *Gaiety* and the *Novelty*, near the Victoria sta. at the S. end of Esplanade Market Road, the *Alexandra* near Crawford Market, the *Indian Theatre* in Grant

Road, and many Cinematograph Theatres.

Tourist Office: *Messrs T. Cook & Son*, opposite Esplanade H., are also agents for rly. tickets and all kinds of information in connection with excursions and tours (e.g. to Elephanta and Kanheri).

Tramways run from end to end of Bombay, and extend from Colaba and the Fort to Grant Road, to Parell, and to the Docks. They are not much used by higher classes of Europeans.

Wine Merchants: *Phillips & Co.* and *Treacher & Co.*, in Esplanade Road.

BORIVLI, 27.

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BOTAD, 202.

BOUGHTON, DR G., 97, 274 443.

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D.B. in town. Waiting Room at sta.

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BUDDHIST CAVES, 26, 34-35, 50, 56, 104, 106, 111, 207, 445, 446, 447, 458, 462-465.

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BUTTALA, R.H. (good),
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C

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Railways From Bombay by Allahabad and by Nagpur, Routes 2 and 7; from Madras, Route 25; from Darjeeling, Route 23 (d); from Dacca, Route 24; from Lucknow and Benares, Rts. 20 (a) and 4.

Hotels: The *Grand H.*, which has been rebuilt, largely extended, and furnished in magnificent style, and is provided with all modern conveniences, is a really first-class Hotel. The cuisine is distinctly good; 8 rs., *H. Continental*, 8 rs., both in Chowringhi; *The Great Eastern H.*, Old Court House Street, good; *Spence's H.*, Wellesley Place, moderate; *Bristol H.*, 1 Chowringhi, not residential, but the food is good. At one time the Hotels in Calcutta were disappointing, but of late years great enterprise has been manifested in this direction, and vast improvements have taken place at the *Grand* and the *Great Eastern*. Electric fans usually 1 r. per diem.

Boarding Houses are numerous, and are often preferred to hotels, especially for a lengthened stay in Calcutta. The approximate charges are 175 rs. a month, or 7 rs. a day, for board and lodging (wine not included). In the height of the season, about Christmas time, charges sometimes run up to 9 rs. and to 10 rs. a day, and accom-

modation must be secured weeks beforehand. Meals are taken together as a rule, but in some houses suites or single rooms may be engaged, with meals served in private.

Mrs Walter's, 1 and 2 Little Russell Street, and 48 Theatre Road; *Mrs Pell's*, 1 Camac Street, 9 Middleton Row; *Mrs Lord*, 233 Lower Circular Road; *Mrs Campbell*, Bedford House, 1 Theatre Road; Outram House, 26 and 27 Camac Street; *Mrs Blake*, 3 Wood Street, 11 Short Street, and 25 Camac Street, and *Mrs Baily*, 10 Middleton Row.

Residential Flats are now built in comfortable, up-to-date style, and are largely resorted to by single persons and families. Some of the buildings are very fine. Esplanade Mansions, Ezra Mansions (both in Govt. Place, E.). Chowringhi Mansions, Park Mansions (Park Street), Harrington Mansions (Harrington Street).

Restaurant and Confectioners: *Pelitti*, 11 Govt. Place; *Gt. Eastern H.*, *Grand Café* attached to *Grand Hotel*, entrance Corporation Place; *Trocadero*, 10-11 Esplanade East; *Bristol Grill*, Lyon's Range; *Empire Restaurant*, Hindustan Insurance Buildings, Hogg Street; *Hotel Continental*, 12 Chowringhi; Morello, Park Street.

Bankers and Agents: *Grindlay & Co.*, 11 Hastings Street.

King, Hamilton and Co. (Branch of Henry S. King & Co., 65 Cornhill), 4, 5 Koila Ghat Street, undertake all business in connection with travelling and financial arrangements for travellers in India.

T. Cook & Son, 9 Old Court House Street, supply all kinds of information about excursions and tours in India, and provide circular tickets, etc.

Cox & Co., 5 Bankshall Street, shipping passage, agency and banking business.

Banks: *Bank of Bengal*, 3 Strand; *Ch. Bank of India*, Australia, and China, 5 Clive St.; *Merc. Bank of India, Ltd.*, 28 Dalhousie Sq.; *Delhi and London Bank.*, 4 Council House St.; *Hong - Kong and Shanghai Banking Corp.*, 31 Dalhousie Sq.; *National Bk. of India*, 104 Clive St.; *Alliance Bk. of Simla*, 5 Council House St.; *Allahabad Bk.*, 101-2 Clive St.

Bath: An excellent *Swimming Bath* on the Esplanade, admission through members.

Booksellers and Stationers: *Thacker, Spink, & Co.*, Esplanade East; *W. Newman & Co.*, Dalhousie Sq.

Chemists: *R. Scott Thomson & Co.*, 15 Chowringhi Road; *Frank Ross & Co.*, 16 Chowringhi; *Bathgate & Co.*, Old Court House St.; *Smith Stanistreet*, Dalhousie Sq.

Churches: (ANGLICAN) — *St Paul's Cathedral*; *St John's Church*, formerly the Cathedral; *The Old Church* (C.M.S.); *St Peter's*, in the Fort; *St Thomas's* (the Free School Church).

(CHURCH OF SCOTLAND) — *St Andrew's*, Dalhousie Sq.; *U.F. Church of Scotland*, Wellesley Sq., Manse, Park St.

OTHERS: *The Wesleyan Church*; *the Baptist Chapel*, Lal Bazar and Circular Road; *Congregational Union Chapel*, Dharmtolla & Hastings; *American Meth. Episcopal*, Dharmtolla; *R.C.*, Middleton Row; Portuguese Church Street; Dharmtolla Rd.

Clubs (Residential): *Bengal Club*, 33 Chowringhi Road, S. side of Esplanade. The houses, to Park St. and 1 Russell St., are fitted as chambers for residents; 33 Chowringhi Road contains bedrooms for members. Members of this Club are hon. members of the *Madras*, *Byculla*, *Hong-Kong*, and *Shanghai Clubs*, and vice versa.

The United Service Club, 31 Chowringhi Road. Attached to it is 1 Kyd Street.

Calcutta Club, 241 Lower Circular Road (built for the Club), open to Europeans and Indians.

Consuls: *France*, Mons. H. Le Feuvre - Meaulle, Office, 7 Chowringhi Road. *Italy*, Marquis F. Medici di Marignano, 7 Hare Street.

U.S.A., Mr James A. Smith, Office, 9 Esplanade Mansions.

All leading countries are represented at Calcutta by Consuls.

Conveyances: Motors can be hired at about 10 rs. per hr., or 60 rs. per day of 8 hrs., of the French Motor Car Co., 55 Bentinck St., and of the British Engineering Co., 47 Bentinck Street. Taxi-cabs can be hired at rates of 10 as. per m. 1st class, and 2 as. for every subsequent fifth of a mile: detention, 2 as. for every 4 minutes, or 1 r. 14 as. per hr. Carriages can be hired at from 6 rs. to 15 rs. a day. Cabs (commonly called *ticca gharries*) are plentiful; charges are:

By time—

	Class I.	II.
1st hr.	1 r.	12 as.
Subs. hr.	8 as.	6 as.
Half-day	3 rs.	2 rs.
Day.	5 rs.	3 rs. 8 as.

By distance—

	Class I.	II.
1st mile	8 as.	6 as.
Subs. miles	6 as.	4 as.

Dentists: *H. Pedler*, 35 Chowringhi Road; *Smith Bros.*, 9 Chowringhi Rd.; *Metropolitan Dental Co.*, 2 Corporation Street.

Drapers: *Clark & Co.*, Old Court House Street; *Francis, Harrison, Hathaway & Co.*, Government Place; *Whiteaway & Laidlaw*, Chowringhi; *Hall & Anderson*, Chowringhi; *Army and Navy Stores*, Chowringhi.

Hairdressers: *Watson & Summers*, Old Court House St.; *Yond & Co.*, 6

Hare Street; *A. U. Cutler & Co.*, Chowringhi.

Jewellers, Silversmiths, and Watchmakers: *Hawilton & Co.*, Old Court House St.; *Cooke & Kelvey*, Old Court House St.; *Bosch & Co.*, Wellesley Place; *James Murray & Co.*, Government Place, E.; *Garrard & Co.*, 2 Dalhousie Square.

Lady Doctors: *Miss Webb*, Superintendent Lady Dufferin Victoria Hospital, 1 Amherst Street; *Miss Ada White*, 9 Waverley Mansions, Corporation St.

Medical Men: *Lt. Col. Green*, 6 Harington Street; *Col. E. H. Brown* (retired), 4 Harington Street; *Lt. Col. F. P. Maynard*, 6 Little Russell Street; *Lt. Col. F. O'Kinealy*, Presidency General Hospital; *Lt. Col. Sir Leonard Rogers*, 11 Elysium Row; *Lt. Col. J. S. Calvert*, Medical College; *Dr Caddy* and *Dr Houseman*, 2½ Harington Street.

Missions: *Oxford Mission*, 42 Cornwallis Street. The clergy have charge of a Boys' High School, an Industrial School for Indians, and St James's School for Eurasians—all in the city; and of village schools in the Sundarbans 3 m. off. The Superior is Principal of Bishop's College, Circular Road.

S.P.G. 224 Lower Circular Road.

The *Cleaver Sisters*, working since 1881, nurse the General Hospital, Medical College Hospital, and Eden Hospital, and have charge of the Canning Home for Nurses, European Girls' Orphanage, and Pratt Memorial School. In 1890 they took over from the *Ladies' Assocn. (S.P.G.)* their work.

C.M.S., 10 Mission Row, Divinity School, Old Church, Trinity Church, and Christ's Church, Boys' and Girls' Schools, Church of Scotland, Cornwallis Square.

U.F. Church of Scotland, 2 Cornwallis Square. *Baptist Mission Society*, 42 Lower Circular Road.

Indian Booksellers: *S. K. Lahiri & Co.*, 56 College Street.

Newspapers: *The Englishman*, 9 Hare St., the leading paper in Bengal; *Indian Daily News*, 19 British India St.; *Statesman*, 8 Chowringhi Road; *The Asian*, devoted to sport and planting interests; *Capital*, 1 Commercial Buildings, the leading paper on finance, trade, and commerce. The leading Indian papers in English are—*The Bengali Indian Mirror*, *Anwita Bazar Patrika*.

Opticians: *Lawrence & Mayo*; *Solomons & Co.*; *N. Lazarus*, *Walter Bushnell*, *James Murray & Co.*

Outfitters: *Porter Stimson & Co.*; *Harry Clark & Co.*; *Ranken & Co.*, Old Court House Street; *Whiteaway, Laidlaw & Co.*, Chowringhi; *Army & Navy Stores*, Chowringhi and Middleton Street; *Francis Harrison Hathaway*, 13 Government Place; *Hall & Anderson*, 31 Chowringhi.

Photographers: *Johnston & Hoffmann*, 22 Chowringhi Road; *Bourne & Shepherd*, 9 Chowringhi Road.

Photographic Apparatus: *W. Newman & Co.*, Dalhousie Sq.; *John Bles*, 2 Hare St.; *Smith, Stanistreet & Co.*, Dalhousie Square; *Bathgate & Co.*, Old Court House Street.

Societies: CHARITABLE AND RELIGIOUS.—Besides the Societies mentioned above, the following have their Indian headquarters in Calcutta—*The Additional Clergy Society*; *The Methodist Episcopal Mission*; *The London Missionary Society*; *The Wesleyan Missions*; several special *Zenana Missions*.

SCIENTIFIC, ETC.—*The Asiatic Society*, Park Street, founded by Sir William Jones; *The Microscopical Society* and the *Photographic Society* have rooms in the same building.

Steamship Agencies
(General).

P. & O. and British India S.N. Companies (combined). Mail and passenger services to coast Ports in India and Burma, between India, China, Straits Settlements, Ceylon, Japan, Java, Australia, E. and S. Africa, Persian Gulf, Aden, Port Said, Egypt, Marseilles, Plymouth and London: Agents, *Mackinnon, Mackenzie & Co.*, 16 Strand.

Ellerman's Hall & City Lines of S.S., Gladstone, Wyllie & Co., 101 Clive St.
Clan Line Steamers, Finlay, Muir & Co., 1 Clive St.

Messageries Maritimes, 5-6 Hare St.

Anchor Line, Graham & Co., 9 Clive St.

Steamship Agencies
(Local): *River S.N. Co., Macneill & Co.*, 2 Clive Ghat St.

Orissa Carrying Company's Steamers, Macneill & Co., plying between Calcutta and Chandbally.

Calcutta S.N. Co., Hoare, Miller & Co., 38 Strand Road.

Tailors: *Ranken & Co.*, 4 Old Court House St.; *Harry Clark*, 5 do. do.; *W. H. Phelps & Co.*, 15 do. do.; *Harman & Co.*, 12 Govt. Place, E.; *William Heath*, Park House, Park Street; *Har-nack & Co.*; *Macfie & Macdonald*, Old Court House Street.

Theatres: *The Corinthian*, Dharmtolla; *The Royal Chowringhi Road*; *The Empire Theatre*, constructed on the model of the best European theatres, with all modern appliances, Corporation Place (off Chowringhi); *The Grand Opera House*, Lindsay Street. *Indian Theatres* are chiefly in Beadon St.

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Steamship Agents: *Andrew & Co.*; *B.I.S.N. Co.*

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— *BRAHMAN*, 23-24, 26, 106, 500-502, 600.

— *JAIN*, 109, 445, 447, 502.

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Railways: From Delhi and Agra and to Allahabad, Route 22. From Lucknow, Route 22.

Hotels: *Civil and Military*, the best, 5 rs.; *Empress H. (Lee's)*—all poor.

Club: *Cawnpore C.*, Mail.

Banks: *Bengal, Allahabad, National Bank of India, Alliance Bank of Simla.*

Hackney Carriages:

By distance—

Class I. II.

Per mile . 8 as. 6 as.

By time—

Class I.

1st hour or part . 1 r.
every subsequent hour or part . 8 as.

Class II.

Car Tonga

1st hr. or part 12 as. 10 as.
every subsequent hour or part 8 as. 6 as.

Missions: the *S.P.G.* (Mission House, Christ Church) have charge of Christ Church School, Generalganj School, and a Girls' Boarding School.

The *Ladies' Association (S.P.G.)* have six schools and work in the Zenanas.

Woman's Union Missionary Society of America. Methodist Epis. Mission. R.C. Church.

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 D.B. commodious, with servants.
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 D.B. $\frac{1}{2}$ m. from rly. sta.
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 D.B. $\frac{1}{2}$ m. from rly. sta., belonging to Udaipur State, fair.
 For permission to see the fort, and for the use of the elephant, which is kept at the place by the Darbar for the use of visitors, application must be made to the Hákím (chief official) on the spot.
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 Hotels: *Grand Oriental H.* (usually known as the G.O.H.), very good; excellent cuisine.
Bristol H., good.
Galle Face H., quieter and in a pleasanter situation than the G.O.H., close to the sea. $\frac{1}{2}$ m. from the landing-place. There is a swimming bath attached to the hotel.
 The *Grand H.* at *Mount Lavinia*, 7 m. distant by rail from Colombo, is much frequented by visitors. It is delightfully situated on a promontory overlooking the sea. Excellent fish tiffins on Sundays.
 Agents: *H. W. Cave & Co.*, for Henry S. King & Co.; *Thos. Cook & Son*; *George Steuart & Co.*, 14 Queen St., for Coutts & Co., Cox & Co., Grindlay & Co., London County Bank, etc.
 Banks: *National Bank of India, Ltd.*; *Bank of Madras*; *Hongkong and Shanghai Bank*; *Chartered Bank of India, Australia, and China*; *Mercantile Bank of India, Ltd.*
 Chemists: *Colombo Apothecaries Co., Ltd.*; *Cargills, Ltd.*; *Miller & Co.*
 Churches: *St Thomas's Cathedral*, Mutwal; *S.*

Peter's, The Fort; *Christ Church (C.M.S.)*; *Trinity Church*, Maradana; *S. Michael's*, Polwatte; and others.

St Lucia (R.G. CATHE-DRA), *St Philip Neri* (most convenient for visitors), and many others.

(CHURCH OF SCOTLAND) — *St Andrew's*, near the Galle Face Hotel.

(NONCONFORMIST) — *Wes-leyan*, Colpetty and Pettah; *Baptist*, Cinnamon Gardens; *Dutch Church*, Wolfendahl; and others.

Clubs: the *Colombo C.* on the Galle Face.

Golf C. 2 m. from The Fort. Also the *Garden Club* and *Princes Club*.

Consuls:

<i>America</i>	J. A. Nye.
<i>Belgium</i>	P. de Bure.
<i>Bolivia</i>	W. W. Mitchell.
<i>Chile</i>	T. H. A. de Soysa.
<i>Denmark</i>	H. Houlberg.
<i>France</i>	P. de Bure.
<i>Italy</i>	Edward Chaize.
<i>Japan</i>	A. Warden.
<i>Mexico</i>	W. E. Mitchell.
<i>Netherlands</i>	S. P. Hayley.
<i>Norway</i>	F. B. Creasy.
<i>Persia</i>	M. I. Moham-med Ali.
<i>Portugal</i>	A. Shairp.
<i>Stam</i>	T. S. Clark.

Dentists: *Dr H. W. Atkins Smith*, at the G.O.H.; *Dr Sidney Garne*, Bristol Hotel.

Doctors: *D. Rockwood*; *F. Grenier*; *P. W. Matthew*.

Booksellers, Stationers, etc. *H. W. Cave & Co.*, Queen St., and the *Colombo Apothecaries Co. Ltd.*

General Outfitters: *Cargills, Ltd.* (also at Kandy and Nuwara Eliya); *Whiteaway, Laidlaw & Co.*; *Miller & Co.*; *Smith, Campbell & Co.* (all three also at Kandy).

General Stores: *Cargills, Ltd.* (also Kandy and Nuwara Eliya); *Miller & Co.* (also Kandy); *Whiteaway, Laidlaw & Co.* (also at Kandy); *Colombo Apothecaries Co., Ltd.* (also Kandy).

Hackney Carriages: 50 c. for every half hour: 5 rs.

for every 6 hrs. between 6 A.M., and 12 midnight (with-in Municipality). For a trip to Mount Lavinia or Kelaniya and back, 7rs. 50 as. These rates refer to single-horse carriages without rubber tyres.

Hospitals: *General Civil Hospital*, with three wards for Europeans; *Eye Hospital*.

Ivories, Tortoiseshell Jewellery, Moonstones, etc.: *N. W. H. Abdul Kadir*, Main St.; *O. L. M. Macan Marcar*, at the G.O.H.

Missions: *S.P.G.*, St Thomas's College; Mount Lavinia; *C.M.S.*, Galle Face, Christ Church; St. Luke's, and several schools. *E. Grinstead Sisters*, Schools and Orphanage (at Polwatte).

Motors: *Walker, Sons & Co. Ltd.*; *Brown & Co. Ltd.*

Photographers: *F. Skeen & Co.*, 41 Chatham St., Fort; *Plate Lso, Colpetty*; *Colonial Photographic Studio*, York St.

Railway and Coaching Rates and Carriage and Rickshaw Fares: see *The Pocket Time and Fare Table*, 10 cents; published by Government.

Steamship Agencies:

The P. & O. S.N. Co. office is in the Victoria Arcade, opposite the G.O.H. and the Messageries at No. 5 Prince Street.

Messageries Maritimes. Agent, De Bure.

Orient Agent, Whittall & Co.

Bibby Line. Agents, Carson & Co.

British India S.N. Co. Agents, Mackinnon Mackenzie, Arcade Buildings.

Ellerman's Hall and City Lines. Agents, Aitken, Spence & Co.

Anchor Line. Agents, Delmege, Forsyth & Co.

Clan Line. Agents, Jas. Finlay & Co.

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R.H. here, and good waiting-room at station. Conjeeveram can be visited from Chingleput or Arkonam.

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Coonor Club. *Pasteur Institute*.

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Steamship Agents:

B.I.S.N. Co., Parry & Co.

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Missions: *Orissa Baptist*, *R.C. Church*.

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D.B. near rly. sta.

Club: *Dacca C.*

Bank: *Bank of Bengal*.

Hackney Carriages: 1st

hr., 12 as.; subsequent hrs., 6 as. Half-days, 1rs.; day,

3 rs. 8 as.

Missions: *Baptist*; *R.C. Cathedral*.

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Hotels: *Strawberry Bank H.*; *Springfield H.*; *Grandview H.* (best).

Between Pathankot and Dalhousie it is most convenient to sleep at the hotel at Danera.

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D.B. beyond town at mouth of river (good).

DAMBOOL or DAMBULLA, E.H. excellent, 679.

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Hotels: *Woodlands H.*, good, with fine views; *Drum Druid H.*; *Rockville H.*; *Central H.*; *Bellevue H.*; *Mount Everest H.*; *Park H.*; *Benmore H.*

Boarding Houses: *Ada Villa*; *Boscolo's* (good cooking); *Beechwood*; *Alice Villa*; *Anandale*; *The Labyrinth*.

Clubs: *Darjeeling C.*, Auckland Road; *Gymkhana C.*; and *Station C.*

Masonic Lodge: *Mount Everest*, 2439, E.C.

Bank: *Alliance Bank of Simla*.

Chemists: *Roberts, Smith, Stanistreet & Co.*, Frank Ross.

Outfitters: *Whiteaway, Laidlaw & Co.*; *Francis, Harrison, Hathaway & Co.*; *Hall & Anderson*; *Mitchell & Co.*; *Jeimul & Bhograf*.

Churches: *Scotch Church*; *R.C. Church*; *St Andrews, English*; *St Columba's, Scotch*; *Union Methodist*; *Loretto, R.C.*; *Jalapahar Cantonment*;

(1) *English*, (2) *R.C.* ;
Lebong Cantonment ; *Eng-
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Club : *Dehra Dun C.*

Bank : *Alliance Bank*
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Hotels : *Maidens H.*,
in the Civil Lines (electric
light and fans) ; *Cecil H.*
(Mrs Hotz), in the Civil
Lines, near Ludlow Castle,
very good, from 8 rs. up-
wards ; *Woodlands H.*, by
St James's Church. *Civil*
and *Military H.*

Railways : From Bom-
bay, Routes 10, 11(a), and
12(c) ; to Lahore, Route
15 ; to Agra, Cawnpore, and
Allahabad, Route 22 ; to
Lucknow, Routes 15(b)
and 20.

Club : *Delhi C.*, in Lud-
low Castle ; *Imperial Gym-
khana*, Kingsway.

Banks : *Bank of Bengal*,
Delhi Bank, *Bank of*
Upper India, *Alliance*
Bank of Simla, *Panjab*
Bank, and others.

Motor-cars on hire at
Maidens H. ; *Piari Lal*
& Co. ; *Delhi Motor Co.* ;
Pratt & Co. ; the three
last-named being inside the
Kashmir Gate.

Hackney Carriages :

Class I. II.

Per day 1 . 5 rs. 3½ rs.

1st hr. 1 . 1 r. 12 as.

Subs. hr. 1 . 8 as. 6 as.

To the Kutb 8 rs. 6 rs.

Newspaper : *The Morn-
ing Post*.

1 These rates apply to trips
to Humayun's Tomb, Nizam-
ud-din, and Safdar Jang.

Churches : *St James's* ;
St Stephen's, of Cambridge
Mission ; *R.C. Church*.

Missions : *S.P.G.* and
Cambridge Mission ;
Baptist Mission ; *Baptist*
Zenana Mission.

Photographer : *Sultan*
Ahmad Khan, inside Delhi
Gate.

Merchants : Many well-
known shops in the Chandni
Chauk of jewellers and
sellers of embroideries and
all kinds of ornamented
ware.

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D.B., Tonga from Mhow
(33 m.), rs. 12-15.

Tonga on to Mandu
(22 m.), rs. 10-12.

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Club : *Dibrugarh Dis-
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Hotel : *The Clive H.* at
Clive House.

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The caves are now most easily reached from Daulatabad station. Write beforehand to Nusserwanji, Aurangabad, asking him to send a tonga (10 rs. + 2 rs. per diem for detention) to meet train.

Daulatabad station is 10 m. from Ellora. D.B., small, at Rauza, and State R.H.s. at Ellora, but permission to occupy them must be obtained from the P. Sec. to H.E. the Minister, Hyderabad.

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ENGLISH BAZAR, Malda Dt. starting-place for Gaur, 415.

Accommodation: There is a well-equipped D.B. at English Bazar. A servant who can cook should be taken to Gaur and Pandua. A carriage can be obtained only by the kind services of the Magistrate.

ENNUR, 460.

ERINPURA Rd., 183.

ERNAKULAM, 566.

ERODE Junction (for Trichinopoly) (R. and D.B.), 560.

Excellent sleeping accommodation at the rly. sta.

ETAMPITIYA, 665.

ETAWAH (R.), 405.

D.B. $\frac{1}{2}$ m. from rly. sta.

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Permission to occupy the D.B. is no longer required; but it is desirable to send notice (in the vernacular) of the proposed visit to the Fehsildar, Ajanta, H.H. the Nizam's dominions.

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D.B. close to rly. sta.

Ajodhya, an ancient centre of Hinduism, is 4 m. distant.

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D.B. $\frac{1}{2}$ m. from rly. sta.

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(R.) Hotel: *Oriental H.*, fairly comfortable.

Steamship Agencies: *Clan Line*, Clark, Spence & Co.; *British India S.N. Co.*, E. Coates & Co.; and *Asiatic Steamship Co.*, John Black & Co.

Banks: *Mercantile Bank of India, Ltd.*; *National Bank of India, Ltd.*; Clark, Spence & Co., Agents.

Store: *A. R. Ephraim & Co.*

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Waiting and Refreshment Rooms at rly. sta.

with sleeping accommodation (poor).

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*Hotels: Grande H. Portu-
 gues; H. Crescente; H.
 Central, and H. Republica.*
 Carriages available for drive
 to Old Goa.
 In the cold season
 steamers leave Bombay
 daily at noon, arriving at
 Goa the following after-
 noon, and proceeding twice
 a week to Mangalore.
Steamship Agents:
B.I.S.N. Co., A. B. D.
*Souza (Mormugao); Bom-
 bay S.N. Co., J. Trasse*
(Mormugao), and V. Alvares
(Nova Goa); Goa Trad-
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 only H. (good). Visitors,
 as a rule, take up their
 quarters in wooden huts
 procurable at a small rent
 from the State, and gener-
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 in tents.

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Hotels: Gwalior H. (Old
Musafir Khana); Lashkar
H.; Grand H., every hand-
 some structure under
 European management, ex-
 tremely well-furnished and
 thoroughly well-equipped,
 fitted with electric light and
 fans.

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Simla.

Missions: Methodist
Episcopal; Do. Zenana
Mission; R.C. Church.

Hackney Carriages,
 poor. Fares to Gwalior,
 12 as. and 8 as.; to Morar,
 1 r. and 12 as.; per hour of
 detention, 4 as.; double fare
 for return journey.

Gaul Carpets, etc., made
 to order, reasonable price,
 good work.

H

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(The rly. sta. for Hampi
 is Hospet.)

D.B. at Kamalapur (7 m.
 from Hospet, and within
 1 m. of Ruins), poor. The
 fee for its use is 1 r. per
 diem (1 r. 8 as. for a married
 couple), and the visitor must
 make his own arrangements
 about food, procurable at
 Hospet sta. Mosquito cur-
 tains should be brought.
 There is a Peon in charge
 of the rooms, who will act
 as guide for a small fee.
 The rates entered here are
 for Government officials on
 duty. The rates for
 private persons are 1 r.
 8 as. per diem for each
 adult, and 2 rs. 4 as. for
 a married couple. Private
 persons must obtain the
 permission of the Collector
 to occupy the bungalow.

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D.B. 3 minutes' walk from
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Hotel: Adam's Peak
H., for Adam's Peak (pp.
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Physician: Dr Thomas
 at Norwood (4 1/2 m.).

Store and Chemist:
Brown & Co., Ltd.

Bank: *Hatton Bank.*

Livery Stables: *Pate & Co.* Carriage to Talawakelle, 12 rs.; to Laxapana, for Adam's Peak, 18 rs.

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HORTON PLAINS, R.H.
excellent, write beforehand,
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Station Master will order
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Hotels: *Montgomery H.;
Grand H.*

Bank: *Bank of Bengal.*
Chemists: *Leister &
Co.; N. Cursetjee & Co.*
Dentist to H.H. the
Nizam: *J. Morris.*

Hackney Carriages:

By time—
Class I. II.
Per day 9 rs. 4½ rs.
Per hour 1 r. 12 as.
Distances more than 5 m.
from the Residency by
agreement.

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Missions: *C.M.S.*
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Churches: *English
Church and R.C. Church,*
both in the Residency.

Medical Man: The
Residency Surgeon, *Major
Smith*: has a Nursing
Home under his direction.

Reading Room and
English Club.

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Hotels: *Jaipur H.*, very
good and well managed,
formerly *Rustom Family*
H., 7 rs. per head per day
for board and lodging; *The*
New H. (proprietor, Lala
Ram Bagoji), very good,
clean, and comfortable;
Kaisar-i-Hind H. The
proprietors of these hotels
have carriages for hire, and
will, if necessary, make
arrangements for visitors
for tongas, bullock-carts, or
ponies, for the ascent right
up to Amber by the new
road.

Hackney Carriages:

By time—
Class I. II.
Per day 4½ rs. 2½ rs.
Per ½ day 2½ rs. 1 r. 6 as.
Per hr. 1½ rs. 8 as.

By distance—
Class I. II.
1st mile 8 as. 3 as.
Subs. mile 4 as. 1½ as.

- Open carriages, 8 rs. per diem.
- Church : near the hotels.
Dealers in Silks, Indian Curliosties, etc., *Zoroaster & Co.*, good showrooms.
Enamel Work : *Sabha Chard Gulab Chand*.
School of Art has also good display, work to order.
Scottish Mission.
- J AISALMER, 186.
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- Dharmasala comfortable.
- J AJPUR, 443.
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- Kellner's Refreshment and Retiring Rooms at sta.
- "JAMES AND MARY" SHOAL, the, 99.
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- State D.B.
- Travellers recommended by the Resident may be accommodated at the State R.H.
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- Rooms at the rly. sta. Camels or carriages for Tatta should be ordered beforehand through the station-master.
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- Hackney Carriages :
Class I. II..
1st hr. . . 12 as. 8 as.
Subs. hr. . . 6 as. 4 as.
Rly. sta. to city 8 as. 6 as.
Rly. sta. to civil station 12 as. 10 as.
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- Inspection House.
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Club : *Jhansi Club*.
Indian Club : *Silberrad Union*.
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- Hotels : *Jackson's H. and Cowdeary's H.* (the former being much superior); *Nerbudda Club*. This is the station for the expedition to the Marble Rocks (p. 40).
- Missions : *C.M.S.*; *Ch. of England Zenana*; *R.C. Church*; *Wesleyan Mission*, and various *American Missions*.
- Motors : *Messrs Dinshaw & Co.*; *Sulimanji Akibhoy*; *The Panjab House, Ltd.*; *M. S. Penny*; *Messrs Marshall & Co.*; *Pattulal*. Motor-car hire is 8 as. a mile; detention, 1 r. an hour. These persons have one car each. Victorias, Tongas, etc., may be obtained from Mrs Ford, Civil Lines, near Jackson's Hotel.
- Hackney Carriages :
By time—
Class I. II..
For the 1st hour or portion of hour 12 as. 8 as.
For each succeeding hour . . . 6 as. 4 as.
For day of 6 hrs. 4 rs. 3 rs.
For 1/2 day of 5 hrs. 2 1/2 rs. 2 rs.
- By distance—
Class I. II..
1st mile or fraction of a mile . . . 8 as. 6 as.
For each succeeding mile . . . 4 as. 3 as.
- JULLUNDUR, 203.
- D.B. in Cantonments, about 1 m. from Cantonment rly. sta.
- JUNAGADH, 205.
- Accommodation and conveyances on application to the Administrator of the State. There is a fine Guest House for Indians and officials of rank. D.B. close to rly. sta.
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- KACH for Ziarat, D.B. open May to October (tonga fare 15 rs.), 370.
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- KALAWEWA, 680.
- Travellers will find accommodation at the Govt. Bungalow on the Bund by arrangement beforehand.
- KALINJAR, 159, 161, 224.
- KALKA, 288.
- Hotels : *Lowrie's H.*, next door to P.O. and T.O. (open throughout the year). Railway to Simla.
- KALMUNAI, R.H. good, 691.
- KALNA, 55.
- KALODAI, 667.
- KALPI (Bengal), 100.
- KALPI, D.B., 146-147.
- KALUNGA, 120.
- KALUTARA, R.H. new and excellent, 672.

KALYAN, 31, 460.

R. and Waiting Rooms.
Bullock-carts and pony-tongas for hire.

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KAMANDRUG HILLS, 28.**KAMPTI**, D.B., 116.**KANAKARAYANKU-LAM**, 685.**KANARAK**, 453, 454, 455.**KANAUJ**, 376, 405.**KANBAL**, D.B., 346.**KANDAHAR**, clxiv, 370.**KANDAPOLLA**, 665.**KANDY**, xxii, 661.

Hotels : *Queen's H.* excellent ; *H. Suisse*, facing the lake, excellent.

Club : near Mercantile Bank.

Hackney Carriages : 2½ rs. per ½ day ; 1st hr., 1 r. 20 c. ; subsequent hrs., 30 c.

Chemists : *Miller & Co.* ; *Cargills Ltd.*

Banks : *Mercantile Bank of India, Ltd.* ; *National Bank of India, Ltd.*

Shops : *Cargills, Ltd.* ; *Miller & Co.* ; *Platt & Co.* (for photographs) ; *Whiteaway Laidlaw & Co.* ; *Col. Apothecaries' Co.*

Doctor : *G. Powell Hay.*

Missions : *C.M.S.* sta., Trincomalee St. ; Christ Church ; Trinity Church, College, and Schools.

KANGAN, 347.**KANGRA VALLEY**, 305.**KANHERI CAVES**, 26, 27, 56.**KANKARIYA LAKE**, 178.**KANKESANTURAL R.H.** excellent, 658, 679, 686.**KANKHAL**, 380.**KANKROLI LAKE**, 134.**KANTALAI, R.H.**, 688.**KAPADVANJ, D.B.** good, 179.**KAPURTHALA, RAJA OF**, 33, 299, 401.**KARACHI (R.)**, D.B. close to arsenal, 363.

Railways : From Lahore, Route 18 ; from Bombay and Rajputana, Route 10, p. 184.

Hotels : *The Devon Villa H.* ; *Killarney H.* ; *Bristol H.* ; *Carlton H.* ; *North-Western H.*

Banks : *National Bank of India* ; *Bank of Bombay* ; *Punjab Bank* ; *Commercial Bank of India*, Forbes, Forbes & Co.

Agents : *Cox & Co.*, Bandar Rd.

Newspapers : *Daily Gazette* ; *Sind Observer* ; *Phoenix* ; *Sind Sudhar* (vernacular).

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Gymkhana and Ladies' Club within five minutes' walk from Sind Club.

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Hackney Carriages :

Class I. II.

Victoria.

1 hour or less 12 as. 9 as.
For every additional hour or portion of hr. 6 as. 4½ as.

Missions : *C.M.S.* ; *Methodist Episcopal*.

Motor-cars are available on hire.

Churches : *R.C.* ; *Scotch*.

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P. & O. British India S.N. Co., *Mackinnon, Mackenzie & Co.* Direct weekly S.S. meet in-coming and outgoing P. & O. steamers to and from Europe at Bombay. Weekly steamer to Persian Gulf ; coast steamer bi-weekly to Bombay.

Clan Line, *James Finlay & Co.*

Ellerman's Hall and City Lines, *Forbes, Forbes, Campbell & Co., Ltd.*

Wilson Line, *Finlay, Muir & Co.* To Bombay, Middlesbrough, or Hull every fortnight.

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U.S.A., Mr E. I. Rogers

Italy, Signor Aldo Viola.

Belgium, Mr J. R. Baxter.

Netherlands, Mr D. Van Wijngarden.

Norway, Mr O. Turton.

Portugal, Dr L. Castellino.

Persia, Mir Ayub Khan.

Denmark, vacant.

KARAMAT ALI, 98.**KARHARBARI**, 55.**KARIKAL**, 577, 578.**KARJAT**, 461.**KARLI**, 30, 462-4.

The best way to visit the

Caves is to alight at Lan-

auli (G.I.P. Rly.), and drive to and from Karli.

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(*Pasteur Institute.*)

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Hotel : *Railway H.*

Tongas, ponies, dandies, bearers, and porters await the trains. Tongas to Naini Tal Brewery should be secured beforehand by letter or telegram to station-master. Fare 11 rs. ; one seat 4½ rs. *Ekkas* at moderate rate are available for Indian servants.

KATHIAWAR PROVINCE, 200.**KATHIAR**, 419, 425.**KATMANDU**, 420.**KATNI**, 40, 119, 120.**KATPADI (R.)**, 536. Junc. for Vellore.**KATWA**, 56.**KAUKHALI**, 443.**KAUNIA, D.B.**, 441.

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 Country cart from Mahoba, 3-4 rs.
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 Hotel: *Khandala H. R. and Waiting Rooms.*
 Conveyances procurable. D.B.
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 In the season a motor-bus service (3 days' notice of intended journey desirable; 25 seers of luggage allowed) runs in 3 hrs. to (33 m.) Krishnamanaikan—charge per seat 6 rs. Pony and chair on to Kodaikanal, 2½ rs. and 6½-8½ rs.
 KODKANI. Two D.Bs., 524.

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 A short branch railway runs from Bowringpet to the Goldfields, where there is a good D.B. in the Mysore Company's Camp.
 KOLHAPUR, 484.
 KONDAPALLI, 516.
 KONKAN, the, 31, 460, 462, 480, 481.
 KORA, 414.
 KORBA, 120.
 KOSI, 228.
 KOSLANDE, R.H., 671.
 KOTAGIRI, 562.
 Hotel: *Blue Mountain H.*, good.
 KOTAH, 134, 143, 169.
 KOTAWARA, 372.
 KOTGARH, D.B., 290, 291.
 KOTKAPURA (R.), 352.
 KOTLI, 349.
 KOTRI (R.), 361, 367.
 D.B. (provisions must be taken), not far from Bandar rly. sta.
 KOTTA, 657.
 KRISHNA, 476.
 KRISHNA, lxix, 214, 221-227, 406, 501, 504, 602.
 KRISHNAGAR, 422.
 KRISHNA MURTI, SIR, 528.
 KUCHAMAN ROAD, 188.
 KUCHI BANDAR, 566.
 KUDRA, 53.
 KULANGAM, 344.
 KULAKA, 438.
 KULU VALLEY, 292, 304.
 KUMARHATTI, 288.
 KUMBAKONAM (R.), D.B., 581.
 KUMBHA RANA, 131, 184.
 KUMBH MELA, 44, 380.
 KUMUNA, 691.
 KURJI, 49.
 KURLA, 9, 30.
 KURNOOL (Madras), 520.
 D.B.
 KURSEONG (R.), D.B., 426.

Hotel: *Grand H. (Mrs Monk's)*, late *Clarendon H.*, good, pleasant place for breaking journey. Some people prefer this place to Darjeeling.

KURUKSHETRA Junc., 286.

KURUNEGALA, R.H., 658, 662, 678.

KUSHANA DYNASTY, the, 45, 46.

KUTB (Delhi), 233, 250, 252, 259, 275, 276, 277-8, 455-56.
 Small D.B. close to the great mosque.

Police Rest House in the tomb of Adham Khan. Comfortable quarters. Application must be made beforehand to the Deputy-Commissioner, Delhi, for permission to stop there.

KUTB - UD - DIN, KING OF DELHI, lxiv, lxxv, 61, 72, 190, 276, 278, 294, 403, 405.

KUTTALAM, 598.

KYAUKPYU, 644.

KYAUKSE, D.B., 623.

L

LAHERIA SARAI, 420.

LAHORE (R.), 307, 354.

Railway: From Bombay, Routes 10, 12(c), 15(b); Delhi, Route 15(b); Calcutta to Peshawar, Route 16; to Karachi and Quetta, Routes 18(b) and 19.
 Hotels: *Nedou's H.*, 8 rs.; *Faletti's H.*, Cecil; and several others.

Club: *Panjab Club*, Lahore and Meeran Meer Institute.

Missions: C.M.S., St John's Divinity School, Zenana Mission, and Trinity Church; American Presbyterian; Forman College and Church; R.C. Cathedral; Scotch Church.

Banks: *Bank of Bengal*; *Panjab Banking Co.*; *Allahabad Bank*; *Alliance Bank of Simla*; *Commercial Bank of India*.

Photographers: *Cradock*; *Jadukishan*; *Brenner*.

Chemists: *Plomer*; *Smith & Campbell*; *Frank Bliss*.

Tailors: *Phelps*; *Ranken*; *Ball Moody*; *Fillingham*.

Bootmaker: *Watts.*
Drapers: *Whiteaway*
Laidlaw; Ball Moody.
Hackney Carriages:
 Class I. II.
 Per day . . . 4 rs. 3 rs.
 1st hr. . . 1 r. 4 as. 6 as.
 subs. hr. . . 10 as. 4 as.
 To Meen Meer,
 Shalimar or Shahdara
 and back . . . 2 rs. 1 r.
 For each hr. of
 detention . . . 8 as. 4 as.
Newspapers: *Civil and*
Military Gazette; Tribune;
Punjab,
Churches: *Cathedral;*
Railway Church; R.C.
Cathedral; Presbyterian.
Railway Church, Church
of England.
LAHORE CANTONMENT,
 D.B., 307, 320.
LAHUGALAWEWA, 691.
LAKE, LORD, lxiv, 81, 200, 218,
 227, 230, 240, 252, 262, 285,
 293, 354, 404.
LAKE MANZALA, xlviii.
LAKES, BITTER, xlix.
LAKE TIMSA, xlviii, xlix.
LAKHISARAI, 49, 419.
LAKI (R.), 367.
 No D.B., but good rooms
 at the rly. sta.
LAKKANDI, 503.
LAKSAM, 438.
LALABEG, 339.
LALA MUSA (R.), 325.
LALGOLA GHAT, 425.
LALITPUR, D.B., 144, 158.
LALLY, COUNT, 550, 574, 576,
 582.
LANDI KOTAL, 339.
LANDOUR, 382.
 Hotel: *Woodville H.*
LANSDOWNE, 372.
LANSDOWNE, LORD, 29, 85.
LARKANA, D.B., 366.
LASALGAON, 35.
LASHKAR (Gwalior), 147,
 150, 151, 152, 155, 156.
LASSUNDRA, 170.
LASWARI, 200.
LATS OF STONE, 64, 270-1,
 421.
LAURIYA, 420.
LAWRENCE ASYLUMS:
Mount Abu, 182.
Murree, 330.
Ootacamund, 563.
Sanawar, 288.

LAWRENCE, COL. STRINGER,
 549, 550, 585.
LAWRENCE, SIR HENRY, cxlvi,
 cxlix, 86, 95, 288, 309, 353,
 387-389, 395-396, 399, 401,
 407, 674.
LAWRENCE (SIR JOHN), LORD,
 cl, cli, 81, 254, 290, 307-309,
 320, 338, 396.
LAXAPANA, 663.
 Hotel good.
LEBONG, 429.
LEH, 347.
LETPADAN, 643-644.
LHAKSAR, 372, 380.
LIDDAR VALLEY, 346.
LIMBDI, 202.
LINGAMPALLI, 506.
LODHAN, 354, 357.
LODI, —BAHLOL, IBRA-
HIM, AND SIKANDAR,
 lxxv, 148, 220, 230, 240,
 242, 252, 274, 279, 281, 284,
 298, 378, 483.
LOLAB VALLEY, 344.
LONAR, 113.
LONALI (R.), 462.
Lonali H.; Woodland's
H. and Hamilton H., ½ m.
and ½ m. respectively from
the rly. sta.
 Best starting-place for
 drive to the Karli Cave.
LONDA (R.), 486, 505.
LORALAI, 371.
LUCKNOW (R.), cli-cliii,
 374, 375, 385.
 Railway: From Saharan-
 pur and Benares, Route
 20(a); from Cawnpore,
 Route 22; from Allahabad,
 Route 2.
 Hotels: In the Abbott
 Road, *The Royal H.*, good;
The Grand H.; The Civil
and Military H. In the
 Shah Najap and Clyde
 Roads, *The Carlton H.*,
 good.
 Clubs: *United Service,*
 in the Chatar Manzil
 Palace; *Mohammed Bagh*
C., Cantonments.
 Banks: *Bengal; Upper*
India; Delhi & London;
Allahabad.
 Chemist: *Peake Allen.*
 General Merchants:
Murray & Co.
 Jewellers and Curio
 Dealers: *Bhola Nath Ka-*
poor, in the Chowk.
 Photographer: *Lawrie.*
 Drapers: *Whiteaway*
Laidlaw; Trevellon.

Hackney Carriages:
 By time.—

	1st hr.	Sub.hrs.	or part.	to hrs.
Special	1 r. 8 as.	12 as.		
First (a)	12 as.	6 as.		
" (b)	10 as.	5 as.		
Second (a),				
(b), (c),	8 as.	4 as.		

 Motors: 50 rs. per diem.
Missions: *C.M.S. (at*
Zahur, Bakhsh, Church
of Epiphany and Schools;
Methodist Episcopal of
U.S.A.; R.C. Churches.
 The Museum (Ajaib
 Ghar) is closed at 3.30 and
 on Fridays.
 The Rinks and Picture
 Palace: Forsyth Road.
LUDHIANA, 298.
 D.B. at rly. sta.
 Missions: *American*
Presbyterian; Medical and
Zenana.
LUMDING, 438, 439, 441.
LUNI, 184.
LUNUGALA, B.H. good, 667.
LYALLPUR, 324.
 M.
MACAULAY, LORD, 60, 85, 539.
MACDONNELL, LORD, 42, 234.
MACKESON, COL., 338.
MACNAGHTEN, SIR W., 80,
 86.
MADAWACHCHIYA,
 R.H. good, 679, 684.
MADDUR (R.), 530.
 For the Cauvery Falls.
 Tonga (24 hrs.' notice
 needed), 10 rs.; jhatka, 5 rs.
MADHAVAPUR, 216.
MADHUBAN, 53.
MADHUPUR (R.), D.B.
 50.
MADHU, RAO, PESHA,
 40.
MADRAS, 460, 479, 547, 572.
 Railways: From Cal-
 cutta, Route 25; from
 Bombay, Route 26; from
 Bangalore, Route 32; from
 Ootacamund, Route 34;
 from Tuticorin and Ceylon,
 Route 35.
 Hotels: (under one
 management) *Spencer's H.,*
Brind's H., Cohnemara H.
 (these three are the best),
D'Angels H. — all in
 good positions close to
 Mount Road; *Elphinstone*
H., Balmoral H., Victoria
H. — all in central position

on or near Mount Road, not far from the Madras Club, and 1 m. from rly. sta.; *Woodlands*, Westcott Rd. There are a few small hotels in George Town near the harbour.

Agents: *Binny & Co.*, Armenian St. (Agents for Grindlay & Co., Parliament St.), undertake all business in connection with travelling, banking, and financial arrangements for travellers in India.

Banks: *Bank of Madras; The Indian Bank*, Beach; *Chartered Bank of India, Australia, and China*, Esplanade; *Chartered Mercantile Bank of India, London, and China; National Bank of India, Ltd.*, First Line Beach. *Madras Central Urban Bank Ltd.*, Mylapore.

Booksellers: *Higginbotham & Co.*, Barrand; *Addison & Co.*, Vest & Co.—all in Mount Road; *Kalyanaram Iyer, G. A. Naiesan*, George Town.

Chemists: *W. E. Smith & Co.*, Mount Road and Esplanade; and *MacLure & Co.*, Mount Road.

Clubs: The *Madras C.* Central situation at 1 m. from the rly. sta. on Mount Road.

The *Adyar Club* admits ladies as well as gentlemen; it is 3 m. S. of Madras Club, and in its grounds the *Madras Boat Club* has its sheds. *Gymkhana Club* (Island); *Madras Cricket Club* and grounds, Chepauk.

Restaurants and Confectioners: *D'Angelis and Doraswamy*, both in Mount Road; *Harrison & Co.*, Broadway.

Consuls: Most countries are represented by Consuls or Consular Agents.

Taxi-cabs: a few cars can be hired from *Gully & Co.*, Popham's Broadway.

Hackney Carriages may be obtained through the hotels, or from the "Stable Company" and livery stable keepers. The hackney carriages are very bad: fares usually from 5 rs.

to 7 rs. for whole day, 3 rs. for half a day.

Dentists: *Mr C. F. Badcock*, Egmore; *Dr Eaton*, Mount Road.

Drapers: *Oakes & Co., Smith & André; Whiteaway, Laidlaw & Co.; Wrenn Bennett & Co.*; Mount Road.

General Merchants: *Oakes & Co.; Spencer & Co.*

Jewellers: *P. Orr & Sons*, Mount Road; *Francis Pestonjee Bhungara*, Mount Road; *Ranganadha Tawker*, Mount Road.

Library: *Connemara Public Library*, Egmore.

Market: *Moore Central Market*, near Central rly. sta.

Medical Men: The officers at the several Government Hospitals.

Missions: The *S.P.G.* (Mission House in Rundall's Road, Vepery) serve the following Churches—*St Thome, St Paul's (Vepery)*, and *St John's (Egmore)*, and have charge of a Theological College in Sullivan's Gardens; also of schools and orphanages. *C.M.S.* (at Egmore), *Holy Trinity Church*; *Divinity School*, and *Harris High School*; *R. C. Church*, Armenian St.

There are also other Missions: *U. F. Church of Scotland, Lutheran, Wesleyan, and American Baptist.*

Newspapers: Daily Papers, *The Madras Mail, The Madras Times, The Hindu, New India, The Indian Patriot, Justice.*

Opticians: *P. Orr & Sons, W. E. Smith & Co., Lawrence & Mayo, and Ernest Barnes*—all in Mount Road.

Photographers: *Willie Barke*, Mount Road, *Nicholas & Co.*, Wallajah Road.

Railways: There are two railway systems terminating at Madras:—

(1) *Madras and S. Maharratta Railway*; (2) *S.W. line for Bangalore, Nilgiris, West Coast and South-West Districts*; (3) *N.W. line*

for Guntakal, Wadi, the Deccan Districts and Bombay, and for Bezvada, Vizagapatam, Cuttack, and Calcutta.

(2) *South Indian Railway* for Tanjore, Madurai, Trichinopoly, Tinnevely, Quilon, and Tuticorin and Colombo.

Steamship Agencies: *British India S. N. Co.; Binny & Co.*, frequent sailings for Coast Ports, Calcutta, Burma, Straits Settlements, Colombo for London.

Messageries Maritimes, Volkart Bros. Once a month between Calcutta and Colombo and back, calling at Madras and Pondicherry.

P. & O. S. N. Co., Best & Co. The Company's ships do not call at Madras, but the Agents effect bookings *via* Bombay, Calcutta, and Colombo.

Asiatic S. N. Co., Wilson & Co. For Coast Ports, Calcutta, Burma, Andamans, etc.

Clan Line, Gordon, Woodroffe & Co., Bibby Line and Orient Pacific Line, Leighton & Co.

Ellerman's City and Hall Lines, Best & Co.

Tailors: Smith & André, Moses & Co; Oakes & Co.—all in Mount Road.

MADUGODA, R.H., 669.

MADURA (R). 589.

D.B. close to rly. sta. Sleeping accommodation at the rly. sta.

Bank: *Bank of Madras Club: Madura Club*, 2½ m. from the rly. sta.

Conveyances: poor. Guides: 2 rs. per diem.

MAGAR PIR, 364.

MAGWE, 637.

MAHABALESHWAR, 479, 480.

Hotels: *Race View H., Fountain H.*—both good, fine views; *Central H.; Ripon H.*

Club with bedrooms attached.

Government Mail Motor Contractors: *Frenchman, Brearley & Co.*

Motor Cars from Poona, in 4½ hrs. *Frenchman, Brearley & Co.* of Poona should be asked for the rates and rules.

Mail Motor Car: (15 Oct. to 15 Dec., 15 March to 15 June), 10 rs. per seat.

MAHABALIPURAM, 599.

MAHABAN, 223-224.

MAHABHARATA, lxix, lxxxv, 61, 163, 251, 283, 285, 286, 354, 531.

MAHANADI RIVER, 120.

MAHA OYA, R.H., 667.

MAHARA, 658.

MAHARAJPUR, 94, 149.

MAHASU, 290, has no D.B., but an hotel owned by Mrs Hotz of Simla.

MAHE, 569, 576-577.

MAHENDRAGIRI, 456.

MAHESH, 96.

MAHIM, 162.

Scottish Orphanage, established 1859, the only institution of its kind in the Bombay Presidency.

MAHMUD BIGARA, 167, 171, 173, 175, 177, 178, 179, 180, 206, 208.

MAHMUD, EMPEROR OF GHAZNI, lxii, lxiv, 61, 123, 181, 189, 212, 214, 220, 224, 305, 312, 328, 355, 375.

MAHMUD KOT (R.), 325.

MAHOBA, D.B., 160.

MAHRATTAS, lxxxix, 3, 28-29, 31, 41, 93, 115, 144, 145, 146, 148, 164, 166, 170, 187, 189, 230, 240, 268, 284, 285, 293, 466-7, 470, 472, 481, 483, 484, 504.

MAHRAULI (Delhi), 280, 315.

MAHULI, 483.

MAKARPURA, 168.

MAKLI HILLS, 361.

D.B. (necessary to bring food) ½ m. from Tatta; the building was originally a mosque.

MAKRANA, 176.

MAKAKAND PASS, 336.

MALCOLM, SIR JOHN, 5, 10, 19, 123, 464, 551.

MALDA, 475.

MALIK AMBAR, 102, 104, 110, 111.

MALOT, 328.

MALTA, xliii.

MALVALLI, D.B., good, 530.

MAMALLAPURAM, 509.

MANAAR, R.H., 684.

MANASBAL LAKE, 343.

MANCHHAR LAKE, 367.

Any one making a shooting expedition on this lake will find, *not* Sehwan, but Babak Road Station (131 m. from Lakkur) the nearest rly. sta. to the lake. Arrangements for shikaris and camels should be made through the station-master at Babak Road Station.

MANDALAY, D.B., 606, 610, 611-14, 621-2, 624, 626.

Hotel: H. de Villa, the only H. in 22nd St.; is not fit for European guests, but the D.B. can be used.

Communications: Irrawaddy Flotilla Coy., Express Steamers from Rangoon every Wednesday and Saturday, from Mandalay every Friday and Tuesday. Also daily rail service between Mandalay and Rangoon. Mandalay and Maymyo, and Mandalay and Amarapura.

Club: The Upper Burma Club.

Bankers: National Bank of India, B. Road.

Missions: Winchester Brotherhood (Church of England); American Baptist; Wesleyan; R.C. Church.

Chemists: Curtis & Co.; the English Pharmacy, B. Road.

Drapers and General Outfitters: Whiteaway, Laidlaw & Co.; Rowe & Co.; Bowyer Sowden & Co., all in C. Road.

Conveyances: Ticcagharis (iron-tyred cabs of an inferior description and a few rubber-tyred) can be hired at fixed rates by time or distance. A barouche for sight-seeing can be obtained. An electric tram-service has been laid down in Mandalay and should prove helpful to visitors.

General Stores and Provision Merchants: Hollee's Stores, Merchant Street.

Newspapers: The Mandalay Herald and The Upper Burma Gazette.

Photographers: Creonianski's, C. Road; Johannes & Co., C. Road.

MANDAPAM, 593, 594.

MANDASOR, 128.

MANDHATA, 123.

MANDLA, 117, 118.

MANDOR, 185, 186.

MANDU, 124, 125, 280.

MANDVI, 217.

MANGALORE, D.B., 571.

Steamship Agency: British India S.N. Co. Shepherd's steamer twice weekly in the cold weather.

Bank: Bank of Madras.

Mission: R.C. Cathedral.

MANGI, 371.

MANHARPUR, 120.

MANIA, 158.

MANIKPUR (R.), 41, 162.

MANIKYALA, 203, 329.

MANIPUR, 440.

MANIYACHI, 596. June for Tinnevely and Quilon.

MANMAR (R.), D.B., 35, 100.

MANSERA, D.B., 349.

MAN SINGH, RAJA OF GWALIOR, 148, 153.

MAN SINGH, RAJA OF JAIPUR, 66, 197, 327, 415.

MANU, lxvi, lxxxvi.

MARADANA, 657, 668.

MARAVILA, R.H. good, 676.

MARBLE ROCKS, 2 small D.Bs., 40. Tonga from Jubbulpore, 4 rs.

MARCO POLO, 30, 212, 571, 596, 597.

MARDAN, 336.

MARGALA, 330.

MARGAN, 347.

MARIAM UZ ZAMANI, 242, 245.

MARIAON, 383, 388, 401.

MARSEILLES, xlii.

MARTABAN, 623, 639.

MARTAND, 346.

MARTIN, GEN. CLAUDE, 398, 400.

MARWAR, June, 184, 187.

MARWARIS, THE, 54, 126.

MASHOBA, 290.

MASKELIYA, 664.

MASULIPATAM, D.B., 459.

MATALE, 661, 679.

R.H. good, practically an hotel.

MATARA, 674.

R.H. very comfortable Hotel.

MATHERAN, 461.

Much frequented from Sat. till Mon. in the season.

Hotels: *Grawville H.*; *Metropole H.*; *Clarendon H.*

MATIANA, D.B., 290, 291.

MATILA, 84.

MAU, 159.

D.B. $\frac{1}{2}$ m. from rly. sta.

MAURITIUS, 94.

MAURYAN DYNASTY, the, 45, 73, 74.

MAYAVERAM (R.) D.B., 578, 580.

MAYMYO, 631.

MAYO, EARL, cxliiii, 43, 82, 85, 191, 194, 311, 328.

MAYO MINE, 328.

MECCA, lii, lxiii.

MEDAHAMAHA NUWARA, 662.

MEAN MEER, 320.

MEERUT, D.B., 293.

Hotels: *The Empress H.*, *Pir Bux's*; *Roberts*; *Emmers' H.*

Club: *Wheeler C.*

Bank: *B. of Upper India.*

Motors: *Messrs Graduate Bros.*; *Dinshaw & Co.*; *Provincial Motor Co.*

Missions: *C.M.S.*; *do. Zenana*; *Methodist Episcopal*; *R.C. Church*; *Scotch Church.*

MEGASTHENES, lxxxvi.

MEHKAR 113.

MEHMADABAD, 171.

Good Waiting Room at rly. sta.

MEHSANA, 180.

MEIKTILA, 623.

MENNEGATTI, sr., 261.

MERCARA, 535.

MERGUI, 642.

MERTA ROAD, 187.

MESTON, SIR, J., 42.

METCALFE, SIR C., 81, 91, 295.

METTUPALAIYAM (R.), 561.

Junction of Madras and Nilgiri Mountain Railway to Coonoor and Ootacamund.

Warm wraps should be kept handy.

MHOW, 124.

D.B.; Refreshment and Waiting Room at rly. sta.

MIANI, 361.

MIANI (Kathiawar), 216.

MIDNAPORE, 442.

D.B. close to rly. sta.

Mission: *American Baptist.*

MIHINTALE, R.H., 677, 684.

MINBU, 637.

MINGUN, 630.

MINHLA, 637.

MINNERI, 687, 692.

MINTO, LORD, 94, 136, 259.

MIRAJ (R.), 434.

D.B. near sta.

MIR JAFIR, 76.

MIR KASIM, 49, 294.

MIRZAPUR, D.B., 46.

Club: *Mirzapur C.*

MITHRI, 368.

MIYAGAM, 167.

M'LEOD, SIR D., 312, 313.

MOCHA, liii.

MOGOK, D.B., 632, 633.

MOHPANI COAL-

MINES, 39.

MOKAMEH (R.), 49, 419.

MOKAND-DARRA, 169.

MONGHYR, D.B., Hotel,

419.

MONTGOMERY (R.), D.B.,

354.

MONTGOMERY, SIR R., 309,

320, 354.

MONTPEZIR CAVES, 27.

MORADABAD, 372.

D.B. about 2 m. N. of rly.

sta.; Waiting Rooms at rly.

sta.

Hotel: *Imperial H.*

MORAR, 147.

MORATUWA, 672.

MORMUGAO, 487.

Old Palace H. good.

MORTAKKA, R.H., 122.

Starting-place for Unkarji.

MORVI, 201, 217, 468.

MOTIHARI (D.B.), 420.

MOULMEIN, 623, 639-642.

Hotels: *Bellas*, *Silver-*

dale and *Criterion.*

N.B.—Board and lodging obtainable at the Circuit House on application to the Deputy Commissioner, if the hotels are full.

Club: *The Gymkhana.*
Bankers: *Bank of Bengal.*

Chemists: *The New Medical Hall*, Lower Main Road; *Dr Hynes*, Dispensary, Maingay Street; *De Souza's*, Lower Main Road; *The Moulmein Pharmacy*, Mission Road.

Conveyances:

Motors: *Mr Mitchell*, Moulmein Ice Factory,

Maingay Street; *Mr Lamb*, Upper Main Road.

Carriages: *Mr Lamb's* Livery Stables, Upper Main Road.

Hackney Carriages: 1st class rubber-tyred, and 2nd class generally superior to those met with in other towns in Burma.

Medical Officer: *The Civil Surgeon.*

Newspaper: *The Moulmein Advertiser*; *The Moulmein Daily News.*

MOUNT ABU, 181.

Good Refreshment and Waiting Rooms at Abu Road Sta. 17 m. from Mt. Abu.

Conveyances. See Abu Road.

D.B. on the hill.

Hotel: *Rajputana H.*

good.

Bazar for English stores.

Club: *Rajputana C.*

Missions: *C.M.S.*; *do. Zenana*; *R.C. Cathedral.*

MOUNT LAVINIA, 657, 672.

Hotel: *Grand H.*, first-

rate accommodation.

MUDKI, 298, 353.

Mughal Emperors, lxxv.

MUGHALSARAI (R.), 46,

380.

MUHAMMAD, lviii, lxiii.

MUHAMMAD GHAS, 151.

MUHAMMAD GHORI, 248.

MUHAMMAD SHAH, KING OF

DELHI, 251, 274, 286.

MULTAN, 355.

Refreshment and Waiting Rooms; D.B. about 1 m.

N. of the rly. sta.

Hackney Carriages:

There are practically no 1st and 2nd Class hackney carriages; those of Classes

III. and IV. and tongas

are chiefly in use.

Fares: *Cl. III.* IV.,

Single hour 7 as. 4 as.

and less for subsequent hrs.

MUMTAZ MAHAL, 37, 234.
 MUNRO, SIR HECTOR, cxlvi,
 47; 547; 569, 576.
 MUNRO, SIR T., 474, 477, 520,
 548, 549, 551.
 MURREE, 330, 342.
 Hotels: *Powell's H.;*
Rowbury's H.; Vicu-
forth; Ghilsie Lodge;
Lockwood H.
 Club: *Murree C.*
 Banks: *Alliance; Cox's.*
 Schools: *Lawrence*
Asylum; St Dens's School;
St Thomas's R.C. College.
 MURSHIDABAD, D.B. at
 Berhampore, 414, 423.
 MUSEUMS, 18, 72, 82, 116, 132,
 136, 168, 194, 223, 261, 304,
 337, 364, 397, 529, 555, 556,
 598, 620, 656.
 MUSHKAF, 368, 369.
 MUSSOOREE, 291, 382.
 Hotels: *Charleville H.*
(Wutzler's) very good;
Savoy H., good; (both on
Mal); Woodville H.;
Zephyr Hall H.; Kenil-
worth Hall H.; Grand
Central H.; H. Cecil and
several boarding-houses.
 Clubs: *Himalaya;*
Happy Valley.
 Banks: *Alliance Bank*
of Simla; Allahabad B.;
Bhagwan das B.
 Churches: *Scotch; R.C.*
and Church of England;
Christ Church and Union
Church.
 Newspaper: *Mussooree*
Times.
 Chemists: *Fitch, Sam-*
uel, Hammer.
 Dentists: *Dr Hunter,*
M. A. Shah, Dr Haskew,
C. Batten.
 Photographers: *Rust,*
London Photo Co.
 Drapers: *Clark; Moore;*
Trevelion; Hathaway;
Whiteaway Laidlaw.
 Schools: *St George's*
College; E. I. R. Schools;
Woodstock Girls' School;
Hampton Court; Caine-
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sta. Waiting Rooms at sta.
 Club: *Central Pro-*
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 Banks: *Bank of Bengal;*
Allahabad Bank.
 Missions: *United Free*
Church of Scotland; R.C.
Church; Scottish Epis-
copal Mission.
 Chemists: *Nicholas;*
Velloz.
 Hackney Carriages:
 Class I. II.
 Day . 3 rs. 8 as. 3 rs. 8 as.
 Half-day 2 rs. 4 as. 2 rs. 4 as.
 1st hr. . 12 as. 10 as.
 Subs. hr. . 6 as. 4 as.
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Grand Hotel (formerly
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Lake House H.; Royal
H., all from 6-7 rs.
 Club: *Naini Tal C.,*
near St John's Church;
Indian Club, on the N.
Mall.
 Banks: *Allahabad;*
Upper India.

Newspapers: *Naini Tal*
Gazette.
 Chemists: *Peake Allen;*
Chandler & Co.
 Photographer: *Lawrie.*
 General Merchants:
Murray & Co.; Shapoor-
jee; Gorin & Co.
 Drapers: *Whiteaway*
Laidlaw; Trevelion;
Shirley Smith.
 Tailor: *Anderson.*
 Jewellers: *Rufener,*
Landau.
 Hardware Merchants
 and Agents: *Matthews*
& Co.; Krishna Das &
Bros.; Municipal Markets,
 for all provisions; *Malu*
Tal and Assembly Rooms;
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 D.B. Six rooms,
 splendid view of snowy
 range.
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NASIK ROAD, 32.
Waiting Rooms. Tongas
on hire (the fares are under
revision).

By time—

Class I. II.
For day (inside
Station limits) $3\frac{1}{2}$ rs. $2\frac{1}{2}$ rs.
Per hr. . . . 8 as. 6 as.
Rly. Station to
City or Dak
Bungalows . . . 1 r. 12 as.
Tramway to City $4\frac{1}{2}$ m.
distant.

NASIK, D.B., very good,
8 rooms, 32. (Application
for accommodation should
be made to the manager of
the D.B.)

Mission: C.M.S. sta.
at Sharapur, see p. 33.
Headquarters of *Royal*
Western India Golf Club;
good links.

NASIM BAGH, 345.

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D.B., 1 m. from rly. sta.

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Steamship Agents:

B.I.S.V. Co., weekly
service to coast ports.
Rooms at railway station.

NEGOMBO, 657, 676.

R.H. excellent.

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D.B. good.

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Very good Waiting
Room, with Baths, etc.,
at rly. sta.

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NOWGONG, D.B., 159-
18 m. from Harpalpur.

Tonga, 7 rs. 2 as.; seat in
mail tonga, 4 rs. and 2 rs.

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Hotels: 1st class—The
Grand; New Keena H.
(annexe to *Grand H.*);
Carlton H.

2nd class—*Pedro H.*; *St*
Patrick's H.; *St Bene-*
dict's H. There are also
Boarding-houses.

Clubs: Hill Club;
United Club; Golf Club.

Stores and Chemists:
Cargills, Ltd.; *St Louis*
Pharmacy; N. Eliya Apo-
thecaries Co.; *Paul, Sons*
& Co.; *Abram Saitu &*
Co.

The Golf Links are ex-
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Hotels: Sylk's H.;
Centre H.; *Rosemount*
H.; *Shoreham H.*; *Long-*
wood H.; *Fir Grove H.*

Boarding-houses: Long-
wood; Alta Villas; West-
ward Ho!

Clubs: Ootacamund C.
and Gymkhana C.

Bank: Bank of Madras.
Schools: Lawrence Asy-
lum; Brecks' Memorial
High School.

Chemists: W. E. Smith
& Co.; and the *Nilgiri*
Pharmaceutical Co., Ltd.

Photographers: Wiele
& Klein; W. Burke.

Drapers: Wren & Ben-
nett.

General Merchants:
Oakes; Spencer; Wrenn,
Bennett & Co.; White-
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Jewellers: Barton &
Sons.

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Hotel: Hill H.

Tonga and motor from
Piparia. Tonga 16 rs.; seat
in motor, generally 8 rs.;
special motor 40 rs.

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PAKOKKU, 633.

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Missions: C.M.S. Train-
ing Institution; Schools;
Sarah Tucker Institution;
Tamil Mission Church.

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the officers of the Palitana
Darbar.

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 Hotel: *Dean's H.* near the Mall, 7 rs.; *Flashman's*; *Provincial R. H.*, opposite the rly. sta.
 Club, near the Church.
 Banks: *Panjab Banking Co.*; *Alliance Bank of Simla*, on the Mall.
 Dealers in C. Asian goods in city: *Safdar Ali*; *Haji Rahman*; *Mal Chand*; *The Kabul Co.*
 Missions: see p. 337.
 R.C. Church.
 Hackney Carriages:
 Class I. II.
 Per day . . . 4 rs. 3 rs.
 Per 1st hr. . . 1 r. 12 as.
 Subs. hr. . . 8 as. 6 as.
 Tonga with 2 horses: To Ali Masjid, 7 rs.; to Landi Kotal, 14 rs. Permission to visit either place must be obtained from the Political Officer, Khyber. The visit to the latter is not now so readily allowed as it was some years back.
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 D.B. Notice should be sent to ensure meals being provided. Country carts available for luggage, Tongas available by writing to Mail Contractor at Pachmarhi. Charge, 16 rs.: seat in mail motor, 12 rs.
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 Excellent sleeping accommodation at the rly. sta.
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 Hotels: *Grand Hotel de l'Europe*; *Hotel de Paris et Londres*.
 English Consul: A. H. Deane.
 Steamship Agents: B.I.S.N. Co.; *Messageries Maritimes*, Virieux, Agent.
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 Hotels: *Connaught H.*, *Napier H.*; *Poona H.* The *Connaught H.* is at present (1917) the best.
 Bank: *Bank of Bombay*.
 Clubs: *Western India C.*, *Gymkhana C.*, *Royal Connaught Boat C.*, *Ladies' C.*, etc., etc.
 The *Boat Club* forms an important feature in the amusements of the place.
Gymkhana Club and Library. A visitor, introduced by a member, can join the Club. On the cricket-ground, attached, are played the principal matches during the monsoon months.
Golf Club, fair links.
 Mail Contractor: *Frenchman, Brearley & Co.*
 Motors can be hired of Frenchman, Brearley & Co., Messrs Stewart & Co., Mehta & Co., Mody's Cycle and Motor Mart, and Wellington Cycle Co. Hire 7 rs. per hr., 50 rs. per diem. Outside limits of place, 8 as. per mile. To Mahabaleshwar (in 4 hrs., 3 passengers), 75 rs. or as arranged. During the season (June-October) taxicabs ply for hire.

Hackney Carriages:*By time—*

Per day . . . 6 rs.

Half-day . . . 4 rs.

Per hr. . . . 1 r.

Large number of fares

by distance.

Newspapers: *Deccan Herald and Evening Dispatch.***Dentists:** *D. H. Davison, H. Bromley.***Chemist:** *Mather.***Photographers:** *Stewart; Backhouse.***Drapers:** *Badham & Pile; Whiteway Laidlaw.***Tailors:** *Leach & Weborny.***General Merchants:** *Ladha Ibrahim; Dorabji & Co.***Missions:** see p. 469. *R.C. Cathedral; Scotch Church.**Cowley Wantage Mission, Panch Howds, Poona City.**C.M.S. station (Mission House at Cyprus Lodge), Divinity School.*

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D.B., $\frac{1}{2}$ m. from rly. sta.
Hotels: *Seaside H.; Beach H. and Sanatorium,* very fair.

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QUETTA (R.), D.B., *Lourde's H.*, 369, 371.**Club:** *Quetta C.***Bank:** *Alliance Bank of Simla.***Missions:** *C.M.S., R.C. Church; Scotch Church; Methodist Episcopal C.***Chemists:** *Milne; Bliss.***Outfitters:** *Bell, Moody & Co., Phelps & Co.***Hackney Carriages:**

Rates by time and distance have been settled in great detail, and should be ascertained.

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Hotels: *Royal H.; Ellenborough H. Hurst's Agency for jhampons, ponies, and dandies available. Forwarding Agencies, Lawson, Lindsay & Co.*

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Hotels: *Strand on Strand Road; Minto Mansions, Halpin Road; Royal, 4 Merchant St.; Criterion on Dalhousie St.***English Boarding-houses:** *Allandale, Godwin Road; Croton Lodge, Ahlom Road.***Restaurants:** at above hotels; also at *Romani's*, corner of Phayre and Merchant Streets.**Clubs:** *Pegu Club, Prome Road Cantonments; Burma Club, Merchant Street; Rangoon Club, Lake Avenue; Gymkhana Club, Halpin Road—a favourite resort in the evenings. Lady members. Tennis courts, billiard tables, reading-room, bar, etc. Military band most evenings; Boat Club, Royal Lakes; Kokine Club, Kokine.***Agents:** *Thos. Cook & Son, Phayre Street; A. Scott & Co., Merchant Street.***Bankers:** *Bank of Bengal, Sule Pagoda Road; Chartered Bank of India, Australia, and China; National Bank of India; Bank of Rangoon, Phayre St.; Hongkong and Shanghai Banking Corporation; Netherlands Trading Society, Merchant Street.***Booksellers:** *Myles Standish & Co., Merchant Street; Smart & Mookerjee, Barr Street; American Baptist Mission Press, Merchant Street.***Chemists:** *E. M. de Souza & Co., Dalhousie Street; Rangoon Medical Hall, Merchant Street; Sun Drug Co., Sule Pagoda Road.*

Consuls: Most countries are represented by Consuls or Vice-Consuls.

France, J. Scott; Italy, J. Meikle, U.S.A., W. Roderick Dorsey.

Conveyances: Hackney carriages, drawn by single ponies, can be hired at moderate charges, viz., 1st class, 1st hour, 1 r., and succeeding hour 12 as.; 2nd class, 1st hour, 12 as., and succeeding hour 8 as.; not exceeding 2 miles 8 as.; each additional mile, 4 as. For hackney carriages of the 2nd class the fare to be charged is according to the time or distance rate at the option of the hirer expressed at the commencement of the hiring; if not otherwise expressed, the fare is to be paid according to time. The drivers are Indians who do not understand English; they understand Hindustani and Burmese.

Taxi-cabs are numerous, easily obtainable. Fares: between 6.30 A.M. and 10 P.M., 8 as. per mile; 8 as. for 1st mile, and 2 as. for each subsequent $\frac{1}{2}$ mile; between 10 P.M. and 6.30 A.M., 12 as. per mile; 8 as. for 1st $\frac{1}{2}$ mile, and 2 as. for each subsequent 294 yards.

Craftsmen: The principal Burmese silversmiths, goldsmiths, and wood carvers are to be found in Godwin Road; specimens of Burmese wood carving can also be obtained at the Central Jail; images of Gaudama in brass and alabaster, and kalagas (appliqué work) in Kemmendine. Dealers in these and Oriental goods, *Hirst, Phayre St.; Goona Mal Parasram, 71 Merchant St.; Khemchand Tejmal, 82 Dalhousie St.*

Dentists: *W. M. Cameron; R. W. Ransford; W. G. Thompson; A. M. Murray; H. B. Osborn; J. H. Drinkhall; T. Satow.*
General Stores: *Scott & Co., Merchant Street; Barnett Bros., Sule Pagoda Road.*

Hairdressers: *Watson & Son, Phayre Street; also at hotels.*

Medical Men: The Civil Surgeons at the General Hospital; *Dr Foy; Dr Peakey; Dr Findlay; Dr Black; Dr Pearce; Dr Spence.*

Outfitters: *Rowe & Co.; Whiteaway, Laidlaw & Co.; Bowyer & Sowden; Watson & Son; Brisbane & Bratley; Macfie & Co.*

Missions: *Anglican American Baptist; Scotch Church; R.C. Church.*

Newspapers: The two leading English newspapers are the *Rangoon Gazette* and the *Rangoon Times*, and the leading vernacular newspaper is the *Friend of Burma.*

Photographers: *D. Ahuja; Samuel, both in Sule Pagoda Road.*

Railways: There are two lines out of Rangoon—

(1) The *Irrawaddy Line* running to Promé, and connecting with Henzada and Bassein.

(2) The *Sittang Line* running to Pegu (branch to Moulmein), Toungoo, and Mandalay, and thence to Myitkyina.

The terminus for both lines is at King George Avenue. The Irrawaddy line has pick-up stations at Godwin Road, Promé Road, and Alon, and a large station at Kemmendine.

Steamship Companies: *Bibby Line, British India S.N., Bulloch Bros. & Co., Strand Road; Patrick Henderson Line, and Bibby Line; Bulloch Bros. & Co., Strand Road, and Steel Bros. & Co., Merchant Street; P. & O. Line, Thos. Cook & Son, Phayre Street, and Gillanders Arbuthnot, Strand Road.*

Tramways: An electric tramway runs from the Strand Road to the Great Pagoda along China Street and Pagoda Road, another line along Dalhousie Street from Kemmendine to Pazundaung and a third line along Strand Road from Lanmadaw to Dunnedaw.

RANIGANJ, 3 D.Bs., 54-55.
Inspection Bungalow.

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Hotels: *Flashman's H., and Imperial H. are the best; Cantonment H., near sta.; Royal H.; Shahzada H.; Newholdt H., fair.*
Club: *Rawal Pindi C.*

Banks: *Alliance Bank; Cox's Bank; Northern Bank of India; Sind Punjab Bank; Punjab National Bank; Co-operative Bank.*

Missions: *American Presbyterian; Scotch Church; R.C. Church; S.P.G.*

Chemist: *Wilson.*

Draper: *Broom.*

General Merchants:
Jamasji & Sons.

Tonga Agents: (for Murree and Kashmir). *The Imperial Carrying Co.*

Bootmaker: *Ross.*

Tailors: *Ranken; Shaw;*

Pearson.

Hackney Carriages:

Class I. II.
1st hr. 1 r. 12 as.
Sub. hr. 8 as. 6 as.
Tonga, 1 hr. 8 as.; subs.

hr. 4 as.

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Junction for Tirupati and S.I.R., and for Nellore.
Rooms at rly. sta.

RETI (R. and good rly.
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R.H. not far from rly. sta.

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Starting-point for Yercaud and the Shevaroy Hills. The town of Salem is 4 m. from the rly. It is not passed on the way to Yercaud.

Sleeping accommodation at the rly. sta. 7 m. to the foot of the Shevaroy (Jhatkas available, r. r.). 7 m. farther up the Ghat to Yercaud (chairs, each coolie 6 as.).
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 Good Waiting Room at station. D.B. at Satara.
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 The journey is best made from Madras *viz* the Buckingham Canal in a house-boat—a comfortable night journey.
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Hotels: *La Chaumiere*; *Pinewood H.*; *Bonnie Brae and Ferndale H.*; Motor service (6-9 seats) daily to Gauhati. Motor fares 18 rs. per seat. 20 seats of luggage allowed. Luggage by bullock-carts. in 48 hours, 2rs. per maund. *Protestant* *Pro-Cathedral*.

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Hotels: *Cecil H.*, excellent; *Grand (Peliti's) H.*, good; *Lowrie's H.*, on the Mall, close to the Church, Library and Club (open throughout the year; it is also an Agency for coolies, and general forwarding purposes); *Longwood H.*; *Elysium*; *Corstorphane's H.*, excellent;

Central; *Parry's*; *Abergeldie*; *Imperial*; and *Royal*.

Churches: *Church of England*; *Union Church (undenominational)*; *Scottish*; *R.C.*

Banks: *Alliance Bank*; *Bank of Upper India*; *Delhi and London Bank*; *Panjab Banking Co.*; *Bank of Bengal*.

Newspapers: *News of India*.

Chemists: *Plomer*; *Bliss*; *Davies*; *Cotton*.

Photographers: *Bourne & Shepherd*; *Bremner*; *Holz*; *King*.

Drapers: *Whiteaway Laidlaw*; *Clarke*; *Cowmeadow*; *Harrison*; *Hathaway & Co.*; *Richards*.

Tailors: *Coutts*; *Ranken*; *Phelps*; *Fillingham*; *Tregowan*.

General Merchants: *Cotton & Morris*.

Clubs: *United Service*, above Combermere Bridge. *Anandale Gymkhana C.*

Hospitals: *Ripon* (chiefly for Indians); *Lady Dufferin* (for women); *Walker*.

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D.B. excellent, and

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This is the station for Palitana. Write to Dep. Ass. Pol. Agent for a conveyance.

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Nedon's Hotel, very good.

6 rs. per diem.

Visitors to Srinagar generally live in their houseboats, or in tents pitched in the various lovely groves which surround the city.

The best camping grounds are the Munshi Bagh, the Ram Bagh, and the Nasim Bagh (on the Dal Lake).

The Indian Agent (who is styled the Motamid Darbar) of the Maharaja for visitors will give any information as to quarters, prices, coolies, etc.

Banks: *Panjab Bank*; also *Messrs Cox & Co.*

Cockburn's Agency and the *Kashmir General Agency* undertake the hire of boats, tents, furniture, and all camp requisites, which should be ordered to be ready on arrival. They also advise visitors as to purchases, and give every kind of information.

English Church Service every Sunday in the new English Church in the Munshi Bagh.

Missions: The *C.M.S.* has a station and doctors here, and a fine hospital.

Kashmir Visitors'

Rules: Copies are obtainable from the above Agent.

There are fair Gunsmiths and Tacklemakers in the town. There is a Library from which travellers are allowed to take books out.

Residency Surgeon attends visitors during the season.

Photographers: *Mr R. E. Shorter* and *Mr W. Lambert*.

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D.B. good.

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SURAJ-UD-Daula, 76, 100.

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Railway station for the town of Salem, and starting point for Yercaud and the Shevaroy Hills.

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R. Some sleeping accommodation and Waiting Room at rly. sta. D.B. on river bank, near the Post Office, and about 2 m. from rly. sta.

Inlaid work and carved sandal-wood are still obtainable in Surat, though less than formerly. Brocade work, silks, and silver-gilt wire are manufactured.

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Chemists and Store:*Jordan & Co.* (2 $\frac{1}{2}$ m.).

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TALIKOTA, lxii, 500.

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TANGALLA, 674.

R.H. remarkably good and pleasantly situated close to the sea.

TANGROT, D.B., 549.

TANJORE (R.), 582, 584-5.

Rooms for five persons at the rly. sta.

D.B., not very comfortable, close to station, to the E. of the Little Fort, where pony and bullock-carts are available.

Mission: *S.P.G. Wesleyan*.

TANSA WATER SUPPLY, 20.

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There is only an Indian R.H. here, but there is a D.B. (food must be taken) on the *Makli Hills*.

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TELLICHERY, 570.

D.B. good. There is also an excellent little Club.

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Diamond Jubilee H.; Dharmasala for Indians.

THANA MANDI, D.B., 348.

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D.B. good.

TINNEVELLY, D.B., 597.

Missions: *S.P.G.* station (at Nazareth); *C.M.S.* College; *Baptist Mission*.

TINPAHAR, R.H., 49, 414, 419.

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TIRHUT, 419.

TIRUPATI, 478, 575.

Refreshment and sleeping rooms at Renigunta Junction station. Write beforehand to station-master for conveyance.

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TIRUVALUR (Tanjore Dist.), D.B., 578.

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TRICHENDUR, 597.

TRICHINOPOLY (R.), 560, 585-7.

Club: *Trichinopoly C.* Sleeping accommodation at rly. sta. (tolerable, but rather noisy); *Robert's H.* in Cantonments; D.B. 1 m. from sta.; the last two are inferior.Missions: *S.P.G.*, *Wesleyan*, *Lutheran Evangelist*, *R.C. Cathedral*.

TRICHUR, 566.

TRIMALGIRI, 515.

TRIMBAK, 35.

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TRINCOMALEE, R.H., 677, 688-9, 692.

Motor Service from Anuradhapura, 20 rs. and 10 rs. per seat.

Steamship Agents: *Ceylon Steamship Co. Ltd.*

TRIVANDRUM, 598.

D.B. close to Residency. Boats from Quilon, 2 rs. per diem; each rower 1 a. per mile.

TUGHLAKABAD, 228, 251, 252, 273, 281.

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TUNDLA (R.), 405.

TUTICORIN (R.) D.B., 596.

Railway Facilities:

First and second class carriages are run to and from the pier in connection with the departure and arrival of the Mail steamers to and from Colombo. Waiting accommodation is provided at the station for ladies and gentlemen, and there is also a Refreshment Room under the management of Messrs Spencer & Co. In addition to the already existing railway station at Kizhur another station has been opened in Melur Tuticorin, which is over half a mile distant from Kilur station.

Shipping Arrangements:

A British India Steam Navigation Company's steamer used to leave daily at 6 p.m. for Colombo, and one arrives from Ceylon (daily Mondays excepted) at about 7 a.m., the passage occupying about 13 hours, but the daily service has been temporarily suspended; and steamers ply twice a week each way now. The journey between the pier and steamer is made in a steam launch belonging to the British India Steamer Agents at Tuticorin, and occupies about three-quarters of an hour. Of late, increased facilities for landing and shipping operations at the Port have been given by the construction of a new Pier in addition to the two already existing ones, a new customs goods shed and shed for stocking combustibles, and by reclamation of the foreshore.

Banks: *Bank of Madras, National Bank of India.*

Missions, Churches, &c.:

The Society for the Propagation of the Gospel maintains a Training School, and a Secondary School named after the late Bishop Caldwell. There are also a girls' school and medical dispensary managed by the Sisters of the Holy Cross. The principal Roman Catholic Church is that of "Our Lady of Snows," an ancient building said to have been constructed by the Portuguese. The Jesuits have a school named "St Xavier's School."

Club: A Club for Europeans is situated on the sea front.

U.

UDAIPUR, 131, 248.

Hotel, poor. Visitors should write beforehand to manager, as the accommodation is rather limited. Carriages and tongas can be hired. The public conveyances are unusually bad.

Medical Man: *Colonel Beattie*, Residency Surgeon.

Mission: *U.F. Church of Scotland*, medical.

UDAIPUR MAHARANAS, 66, 131, 134.

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VERAVAL, 212-3.

Travellers may find it convenient to get permission from the station-master to retain their first-class rly. carriage at the sta., and to sleep in it at night. There are a good R.H. of the Junagadh State; a *dharma-sala*, several bungalows and a palace residence, occupied by officials and high personages in the hot-weather season.

VERNAG, 346, 350.

VICTORIA, QUEEN - EMPRESS. See Queen-Empress.

VIJAYANAGAR (Hampi), 477, 491, 500, 516, 519, 535, 548, 568, 572-3, 583.

D.B. at Kamalapur. See *Hampi*.

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D.B. 1 m. from rly. sta.

VINDHYA HILLS, 124, 125.

VIRAMGAM, 180, 200.

Waiting Room at rly. sta. *Dharmasala* near Great Tank, well furnished.

VISNAGAR, 180.

VIZAGAPATAM, D.B., 457.

Missions: *L.M. Soc.; R.C. Cathedral.*

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WADEWAN (R.), 202.

D.B. close to rly. sta.

WADI, 476, 505.

R. and beds.

WAGHNAKH, the, 482.

WAL, 479.

D.B. good.

On side nearest Mahabaleshwar Hill.

WAJID ALI, KING, OF OUDH, 88.

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WANDIWASH, 574.

WANGAT, 347.

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Waiting and Refreshment Rooms at rly. sta.

WARGAON, 3, 465.

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WARORA, D.B., 114.

WATHAR (R.), and Waiting Room at rly. sta., 479.

Meals are provided for passengers bound for Mahabaleshwar, if previous notice be given. Tongas can be ordered by writing to the Mail Contractor; Tonga 15 rs. to 20 rs.; Carriage 21 rs. to 31 rs.; Motors to Mahabaleshwar 3 to 7 persons, 60 rs.; Mail Motor per seat 10 rs., in season only.

WATSON, ADMIRAL, 3, 76, 90, 97.

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YENNA FALLS, 480.

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Hotels: *Fair Lawns H.* (under European management); *Silver Oaks H.*

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ZAIN-UD-DIN, SAIYAD, 14, 103.

ZIARAT, good, D.B. open May to Oct.; accommodation can be reserved for 15 days at 1 r. per head per diem, on application to the Political Agent, Sibi. Tonga from Kach, 15 rs., 371.

